

(200)
G 5 cs 34
=

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Ground Water Branch

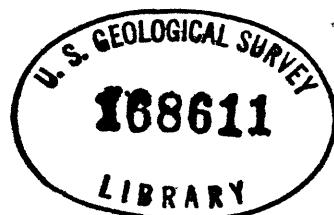
DATA ON WATER WELLS IN THE

UPPER MOJAVE VALLEY AREA,

SAN BERNARDINO COUNTY, CALIFORNIA

By

J. S. Bader, R. W. Page, and L. C. Dutcher



MAY 5 1959

Prepared in cooperation with the
California Department of Water Resources

Long Beach, California
1958

Open-file report

58-8

36448

CONTENTS

	Page
Purpose and scope of the work and report-----	4
Location and general features of the area-----	6
Geologic and hydrologic features of the area-----	8
Previous work and acknowledgments-----	12
Well-numbering system-----	13
References-----	15

TABLES

	Page
Table 1. Descriptions of wells in the Upper Mojave Valley area, San Bernardino County, Calif.-----	16
2. Cross index of other well numbers and Geological Survey numbers-----	133
Part 1. California Department of Engineering (1918) and D. G. Thompson (1929) numbers-----	133
2. U-numbers-----	138
3. U. S. Bureau of Reclamation numbers-----	140
4. San Bernardino County Flood Control District numbers-----	141
3. References that contain water-level measurements in wells in the Upper Mojave Valley area, Calif.-----	142
4. Wells for which periodic water-level records are available-----	143
5. Records of water levels in wells-----	147
6. Drillers' logs of water wells-----	163
7. Chemical analyses of waters from wells-----	219

PLATE

Plate 1. Map of the Upper Mojave Valley area, Calif., showing reconnaissance geology and locations of wells-----	In pocket
--	-----------

DATA ON WATER WELLS IN THE UPPER MOJAVE VALLEY AREA,
SAN BERNARDINO COUNTY, CALIFORNIA

By J. S. Bader, R. W. Page, and L. C. Dutcher

Purpose and Scope of the Work and Report

The data presented in this tabulation were collected by the United States Geological Survey in connection with an investigation of water wells and general hydrologic conditions throughout much of the desert region of southern California. The study has been financed in part by Federal funds for Arid Regions studies, and in part by cooperation with the California Department of Water Resources.

The desert regions of California are characteristically regions of barren mountain ranges and isolated hills surrounding broad valleys or basins which are underlain by alluvial debris derived from the mountains and hills. These basins generally contain ground water, having a wide range in chemical quality, which could be and in some areas already has been developed for beneficial use.

The general objective of the cooperative investigation is to collect and to tabulate all available hydrologic data for the individual desert basins in order to provide public agencies and the general public with data for use in planning water utilization and development works, and for use in possible subsequent ground-water investigations.

Accordingly, the scope of the work carried out by the Geological Survey in each area has included: (1) Very brief reconnaissance mapping of major geologic features to define the extent and general character of the deposits that contain the ground-water bodies; (2) visiting and examining practically all the water wells in the area; determining their locations in relation to geographic and cultural features and the public land net, wherever possible; and recording well depths and sizes, types and capacities of installed equipment, uses of the water, and other pertinent information available at the well site; (3) measurement of the depth to the water surface below an established measuring point at or near the land surface; (4) selection of representative wells to be measured periodically in order to detect and record changes of water levels; and (5) collection and assembly of well records, including well logs, water-level measurements, and chemical analyses.

The work has been carried on by the U. S. Department of the Interior, Geological Survey, under the general supervision of G. F. Worts, Jr., district geologist in charge of ground-water investigations in California, and under the immediate supervision of Fred Kunkel, geologist in charge of the Long Beach subdistrict office. The field work was carried on intermittently between February 1956 and November 1957 from the southern California subdistrict office of the Ground Water Branch at Long Beach by R. B. Bartlett, M. A. Pistrang, J. W. Parra, and the authors.

Location and General Features of the Area

The Upper Mojave Valley area as described in this report and shown on plate 1 covers about 850 square miles and in general includes, after Thompson (1929, pls. 7 and 22), the Upper Mojave, El Mirage, and Fifteenmile Valleys, and part of the headwater region of the Mojave River. In addition, according to local usage and to Thompson (1929), the area includes also Sidewinder, Fairview, Apple, and Victor Valleys.

The area of this study lies in the southwestern part of the Mojave desert region between $117^{\circ}00'$ and $117^{\circ}40'$ west longitude and about $34^{\circ}17'$ and $34^{\circ}45'$ north latitude. The eastern boundary corresponds to the western edge of Lucerne Valley, after Riley (1956); the western boundary corresponds approximately to the eastern edge of Antelope Valley at the Los Angeles-San Bernardino County line. The southern boundary of the area is along a line at the base of T. 3 N., and lies in the mountainous area south of the area of potential well development. The northern boundary is an irregular line that, in general, lies south of the Middle Mojave Valley of Thompson (1929).

The area is shown on all or parts of the following U. S. Geological Survey topographic quadrangle maps: Adobe Mountain, Shadow Mountains, Black Butte, Shadow Mountains SE, Mescal Creek, Phelan, San Antonio Peak, Telegraph Peak, Victorville NW, Adelanto, Victorville, Baldy Mesa, Hesperia, Cajon, and Cedar Springs, all at a scale of 1:24,000; Apple Valley, Lake Arrowhead, Shadow Mountains, San Antonio, Hesperia, and Deep Creek, at a scale of 1:62,500; and Barstow, at a scale of 1:125,000.

Access to the area is provided by U. S. Highways 66, 91, and 395, State Highways 18 and 138, and numerous other paved and dirt roads.

Geographically the area consists principally of broad alluvial fans and gently sloping alluvial plains built out from the northern slopes of the San Bernardino and San Gabriel Mountains. In the northwestern corner of the area the Shadow Mountains rise above the alluvial plain, and along the eastern side the Granite Mountains, Sidewinder Mountain, Bell Mountain, and other isolated peaks rise to considerable heights above the valley floor.

The smaller valleys that make up the larger unit called the Upper Mojave Valley area do not have definite geologic or hydrologic boundaries, but correspond rather to cultural units centered about the areas as shown on plate 1.

Geologic and Hydrologic Features of the Area

The geologic units in the Upper Mojave Valley area can be grouped in two broad categories: consolidated rocks and unconsolidated deposits. The consolidated rocks as mapped (pl. 1) include old metamorphic, volcanic, and crystalline rocks of pre-Tertiary age that form the basement complex (map symbol bc). For the most part these rocks are impervious and, except for minor amounts of water contained in cracks and weathered zones, they are virtually non-water-bearing.

Consolidated sedimentary rocks of Tertiary age (Tp) occur in the southwestern part of the Upper Mojave Valley area. These rocks are part of the Punchbowl formation mapped by Noble (1953). They consist of coarse conglomerate, light-gray to tan arkosic conglomeratic sandstone and heterogeneous cobbles, and buff siltstone containing small heterogeneous pebbles. The hydrologic character of these rocks is not known, but on the basis of their appearance they are judged to be poorly permeable and virtually non-water-bearing.

The Harold formation (Qh) mapped by Noble (1953) also occurs in the southwestern part of the area. This unit is poorly consolidated and, in general, is a grayish sandy siltstone containing lenses of conglomerate, local lime-cemented beds, and occasional beds of brown, red, or green shale and arkosic sandstone. The Harold formation also appears to be poorly water bearing.

Unconsolidated alluvial deposits of Quaternary age underlie most of the desert floor. These unconsolidated deposits are porous, highly permeable, and store and transmit ground water. They also yield significant quantities of water to wells.

The Shoemaker gravel (Qs) (Noble, 1954) overlies the Harold formation and consists of poorly sorted gravel, sand, and silt and local boulder beds. Locally it is poorly consolidated but generally it is unconsolidated. The attitude of this unit suggests that it extends beneath the younger deposits in the valley and would yield water freely to wells where it is saturated.

The older fan alluvium of late Pleistocene age (Qofa) consists of compact arkosic gravel, sand, and silt. The deposits are weathered and locally the feldspars have been altered to clay. Near the mountains the unit contains large, angular boulders, but beneath the valleys it is finer grained and better sorted. The deposit, where saturated, includes the principal aquifers of the area.

Old lake deposits of late Pleistocene and Recent(?) age (Qol) are locally interbedded with the older alluvium. These deposits are silt, clay, fresh-water limestone, and lime-cemented gravel, sand, and silt. In some localities wave-cut shoreline terraces and old gravel and sand beach bars are preserved.

Underlying the flood plain of the Mojave River is an alluvial deposit of Recent age (Qra), composed mainly of fine gravel and sand. Where saturated it yields water copiously to wells. The active channel of the Mojave River (Qrc) consists mainly of highly permeable sand which transmits a large seepage loss to the main water body whenever runoff occurs.

The younger fan alluvium of Recent age (Qyfa) is mostly gravel, sand, and silt and overlies the older units. These deposits generally are poorly sorted and poorly permeable, are usually above the water table, and are believed to yield little water to wells.

Playa-lake deposits of Recent age (Qyl) occur at the base level of some minor drainages. They consist principally of clay and minor amounts of sand.

Unconsolidated coarse to fine dune sand (Qds) occurs in some of the valleys. These dunes are, in part at least, actively drifting; locally some small interdune playas are included in the area shown as dune sand on plate 1.

The principal stream in the area is the Mojave River, which carries surface runoff northward from the San Bernardino Mountains and out of the area through the "upper narrows," a canyon cut in bedrock near Victorville. The amount of flow in the river varied considerably during the course of this investigation (February 1956 to November 1957), depending upon the time of year. The flow of the river at the upper narrows near Victorville was measured at a gage operated by the Geological Survey during the periods March 1899 to July 1906 and November 1930 to September 1936.

Of the approximately 850 square miles of the Upper Mojave Valley area about 200 square miles is underlain by consolidated rocks where wells have not been drilled. In the remaining 650 square miles 1,345 wells were canvassed during the investigation. Of these, 1,212 wells are described in table 1 and are shown on plate 1; the others are destroyed or dry wells for which few or no data are available, and these are not included in table 1.

Table 2 lists cross indexes of Geological Survey well numbers and the numbers previously given to the same wells by other agencies.

Table 3 is a list of published references that contain water-level measurements in wells in the Upper Mojave Valley area. Table 4 lists the wells for which periodic water-level measurements are available. Table 5 lists all available water-level measurements that have not been published. The complete water-level records for seven key wells selected by the Geological Survey to indicate ground-water conditions in various parts of the area also are listed in table 5.

Table 6 contains drillers' logs of 148 wells, which are all that were available in the Upper Mojave Valley area.

Table 7 lists 92 chemical analyses of water from 75 wells. The analyses were made by the agencies shown in the table.

Previous Work and Acknowledgments

Data on ground water in the Upper Mojave Valley area are contained in several U. S. Geological Survey water-supply papers (table 3), California Department of Engineering Bulletin 5 (1918), California Division of Water Resources Bulletin 47 (1934), San Bernardino County Flood Control District Hydrologic and Climatic Data volumes 2 and 3 (1951 and 1954), and an unpublished report by the U. S. Bureau of Reclamation.

Part of the Upper Mojave Valley area is shown on the geologic map of the Barstow quadrangle by O. E. Bowen, Jr. (1954).

The writers wish to express their appreciation for the cooperation given by the many ranchers, well owners, drillers, and other persons visited during the investigation, and for the assistance and information provided by several public agencies.

The California Department of Water Resources and the San Bernardino County Flood Control District provided access to all the pertinent information in their files, including numerous well logs, water-level records, and chemical analyses. The U. S. Department of Agriculture and the U. S. Bureau of Reclamation also provided some chemical analyses, water-level records, and other miscellaneous data. The cooperation and assistance given by these people and agencies contributed materially to the completeness of the data presented in this report, and are most gratefully acknowledged.

Well-Numbering System

The well-numbering system used in the Upper Mojave Valley area conforms to that used by the Geological Survey in California since 1940. It has been adopted as official by the California Department of Water Resources and by the California Water Pollution Control Board for use throughout the State.

Wells are assigned numbers according to their locations in the rectangular system for the subdivision of public land. For example, in the number 3/4-1K2, which was assigned to the irrigation well of M. S. Emery, the part of the number preceding the bar indicates the township (T. 3 N.), the part between the bar and the hyphen is the range (R. 4 W.), the number between the hyphen and the letter indicates the section (sec. 1), and the letter indicates the 40-acre subdivision of the section as shown in the accompanying diagram.

D	C	B	A
E	F	G	H
		1	
M	L	K	J
N	P	Q	R

Within the 40-acre tract the wells are numbered serially as indicated by the final digit. Thus, well 3/4-1K2 is the second well to be listed in the NW¹₄SE¹₄ sec. 1. Because the area lies entirely in the northwest quadrant of the San Bernardino base and meridian lines, the foregoing abbreviation of township and range numbers is sufficient.

For some wells the letter following the section number is designated X in place of one of the 16 letters designating the 40-acre tract. This symbol indicates that the well has been field located and is accurately plotted with respect to its position on the map, but that the control for the public-land net is too poor to warrant assigning a more accurate location number.

For well numbers where a dash has been substituted for the letter designating the 40-acre tract, the dash indicates that the well is plotted from unverified location descriptions; the indicated sites of such wells were visited but no evidence of a well could be found.

References

- Bowen, O. E., Jr., 1954, Geology and mineral deposits of the Barstow quadrangle, San Bernardino County, California: California Div. Mines Bull. 165.
- California Department of Engineering, 1918, Report on the utilization of Mojave River for irrigation in Victor Valley, Calif.: Bull. 5, 93 p.
- California Department of Public Works, Water Resources Division, 1934, Mojave River investigation: Bull. 47, 249 p. (mimeographed).
- Noble, L. F., 1953, Geology of the Pearland quadrangle, California: U. S. Geol. Survey Geol. Quad. Map GQ-24.
- _____, 1954, Geology of the Valyermo quadrangle and vicinity, California: U. S. Geol. Survey Geol. Quad. Map GQ-50.
- Riley, F. S., 1956, Data on water wells in Lucerne, Johnson, Fry, and Means Valleys, San Bernardino County, California: U. S. Geol. Survey open-file rept., 150 p. (mimeographed).
- San Bernardino County Flood Control District, 1951, Hydrologic and climatic data 1947-1950: v. 2, p. 165-169 (mimeographed).
- _____, 1954, Hydrologic and climatic data 1950-51 and 1951-52: v. 3, p. 130-131 (mimeographed).
- Thompson, D. G., 1929, The Mohave Desert region, California: U. S. Geol. Survey Water-Supply Paper 578, p. 371-423.

U. S. Geological Survey, 1940, Water levels and artesian pressure in observation wells in the United States: Water-Supply Paper 886.

1941-57, Water levels and artesian pressure(s) in observation wells in the United States, part 6, Southwestern United States: Water-Supply Papers 911, 941, 949, 991, 1021, 1028, 1076, 1101, 1131, 1161, 1170, 1196, 1226, 1270, 1326, 1409; reports for 1956 and 1957 in preparation.

U. S. Bureau of Reclamation, 1952, Report on Victor Project, California:
41 p. (mimeographed).

Table 1.- Descriptions of wells in the Upper Mojave Valley area, San Bernardino County, Calif.

Source of data and other numbers: The source of data on each line is indicated by the following symbols:
GS observations and measurements made by the Geological Survey on the dates indicated during the 1956-57 investigation as well as information reported to the Geological Survey by owners, drillers, or others; CDE California Department of Engineering (1918), and also republished in Thompson (1929); DGT from Thompson (1929); U from California Department of Public Works (1934), or from Geological Survey Water-Supply Papers given in table 3A; BR from unpublished U. S. Bureau of Reclamation records at Boulder City, Nev.; F from the San Bernardino County Flood Control District. A number following the letters is the well number used in the report or by the agency and is given only where different from Geological Survey numbers.

Date of observation: Data for each well are presented in reverse chronological order, with the most recent information summarized on the top line, opposite the well number. Where only the year is shown, no date was given by the source but the information is assumed to be contemporaneous with other dated information from the same source.

Year completed: The completion date was obtained from the driller's log or reported by the owner, or others.

Altitude: The altitude given is the altitude of land-surface datum, the plane of reference, at the well. Altitudes given to the nearest foot were interpolated from Geological Survey topographic maps having 20- or 40-foot contour intervals. Altitudes given to the nearest tenth of a foot were determined by spirit leveling by the California Department of Engineering (1918) or the U. S. Bureau of Reclamation (unpublished data).

Depth: Depths of wells given in whole feet were reported by owners, drillers, or others; depths given in feet and tenths were measured below land-surface datum by the Geological Survey.

Type well and diameter: Type of well construction is indicated by the following symbols: A auger, C cable tool, Cd cable-tool hole drilled in bottom of dug pit, D dug, Dr driven, R rotary, Rd rotary hole drilled in bottom of dug pit, N no casing, G indicates well is gravel packed. The number following the letter is the diameter of the casing or pit in inches.

Pump data: The type of pump or method of lift is indicated as follows: A airlift, B bucket, C centrifugal, J jet, L lift, N none, S screw, T turbine, Ts submersible turbine. The type of power is indicated as follows: D diesel engine, E electric motor, G gasoline engine, H hand operated, N none, W windmill. The yield or output of the pump in gallons per minute, is usually based on tests performed by the California Electric Power Company and reported by the well owner or driller, and is not necessarily the maximum capacity of the well.

Use of well: Dn domestic, Ds destroyed or dry, I irrigation, In industrial, P poultry raising, Ps public supply, R railroad, S stock, T test hole, Uh unused.

Measuring point: The point from which water-level measurements by the Geological Survey are made is described as follows: Bbc bottom of board cover, Bcl bottom of clamp, Bnc bottom of notch in casing, Bpb bottom of pump base, Bpp hole in pump base, Hvg hole for vacuum gage, Ls land surface, Na no access, Tal top of air line, Tap top of access pipe, Tbc top of board cover, Tc top of casing, Tcc top of casing cover, Tci top of clamp, Tcp top of concrete pipe, Tcr top of wood or concrete curbing, Tdp top of discharge pipe, Tnc top of hole in casing, Tp top of plug, Tpb top of pump base. The suffix letters N, S, E, W, indicate the side; north, south, east, or west, where used. The distance of the measuring point above or below (-) land-surface datum is given in feet and tenths and sometimes hundredths. All measurements of water level are from the same measuring point unless otherwise indicated; however, the measuring points used by the California Electric Power Company, drillers, California Department of Engineering (1918), and others are not known.

Depth to water: Measured depths to water level are given in feet, tenths, and hundredths, or feet and tenths; reported or approximate depths to water level are given in whole feet. The water-level measurements given by the Geological Survey for 1956 and 1957 are below or above (+) land-surface datum. For these measurements the difference in altitude between land-surface datum and the measuring point has been subtracted from or added to the measured water level below or above the measuring point; the measurement given is the depth to water below or above land-surface datum. For CDE (California Department of Engineering, 1918) and DGT (Thompson, 1929) numbers the measurements are given as tabulated in the reference, and as tabulated are depth to water below ground surface, which probably is the same as land-surface datum of this report. For U numbers (from references given in table 3) the depths to water level given are below ground surface, which probably is the same as land-surface datum of this report, except where the distance between the measuring point and ground surface is not known; for these the depth to water below measuring point is shown in parentheses.

Other data: Chemical analysis of water is given in table 7, L driller's log of well is given in table 6. W unpublished records and selected published records of water levels are given in table 5, V_p records of water levels are in the references given in table 3.

19
Table 1
3N/3W

Source of data and other numbers	Date of observation	Owner or user	Type of well	Pump data	Water level
USGS well number	Year com- pleted	Altitude: (feet)	Depth and diam- eter:	Type of yield: well (gpm):	Measuring: point below 1st: (feet): (feet)
3/3-6C1	GS	3- 6-56 G. Lobban	1948	2930	100 C 12 J 1 Dm Tcc 0.5 50.79
6C2	GS	3- 6-56 H. Steele	1952	2940	85 8 J 1 Du Tc 1.0 59.04 L
6C3	GS	3- 7-56 Conaway	1951	2950	126 8 Dm Na dry (10.7) Wp,W 5.7
6E1	GS U-6 CDE-8	3- 6-56 7-15-32 McBain M. Spranger 2-26-17 M. J. Springer	2940	30 12 D	Tc
6E2	GS U-6a	3- 6-56 7-29-46 McBain M. Spranger	1951	2940	12 J 1 Dm Tcc .8 32.85 20.6 Wp,W 5.7
6L1	GS	3- 6-56 R. Puppe	1953	2995	150 C 10 Ts 5 225 Dm, I Tcc .5 95.17 L
6P1	GS CDE-4	2-15-56 2-26-17 C. Philips Vlodek	2931.4	20 D N N	Tcc .5 25.14 2.8
6P2	GS	2-16-56 C. Philips	2960	T 10	I Enc 0 34.72
6P3	GS	3- 6-56 A. Molinar	1955	2950 170 C 8 T 7½	Dm, I Tap .5 78.19

USGS well number Source of data and other numbers Date of observation Owner or user Year completed Altitude (feet) Depth (feet) Type and diameter of eter: (in.) Pump data : well : Use of power : Measuring point : Depth to water : Other data (feet) : Water level : (feet) :

T. 3 N., R. 3 W.--Continued.

3/3-7F1	GS	2-15-56	D. Allard	2950	98	C 14	T 10	550	Dn, I	Hpb	1.0	27.97
7F2	GS	2-15-56	D. Allard	2950	C 14	N	N	Un	Tcc	1.0	22.00	
7F3	GS	4-12-57		2944.4	12	N	N	Un	Tcc	1.0	33.14	
	GS	2-16-56				D	N			0	8.3	
	CDE-3	2-26-17	A. Dewitt									
7F4	GS	4-12-57	D. Allard	2950	14	L	N	Un	TcW	.15	13.60	
7F5	GS	4-12-57	D. Allard	2950	30	D	N	DS		0	10.4	
	CDE-2	2-26-17	Martin McInnis	1913								
7F6	GS	4-12-57	D. Allard	1956	2950	137.0	CG 14	N	TcE	1.0	14.48	
7M1	GS	4-12-57	McInnis Estate	2940	16.4	14	N	Un	Tc	0	8.13	
	GS	2-15-56									15.30	
7M2	GS	3- 7-56		2945	14	N	N	Un	Tcc	.5	14.95	
7M3	GS	4-12-57			18.2	D 3	N	Un	Tc	-5.5	9.21	
	U-3	3-18-32	Martin McInnis			D 12	L	Dm	Tc	0	7.4	
	CDE-1	2-26-17	Martin McInnis	2945.8	22	D	W				7.5	

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Type of well	Pump data	Type of well	Pump data	Water level

T. 3 N., R. 4 W.

3/4-1C1	GS	2- 6-57	N. Plett	1951	2950	127	C 8 J 1	Dm Na
1C2	GS U-7a	6-12-57 2-20-32	N. Platt	2970		6 N N	Ds Dm	Tcr 1.6 41.0 Wp
1C3		2- 6-57	N. Platt	1923	2950	68	10 N N	Un Na
1D1	GS	1-23-57	R. Askew	1903	2925	165	C 8 T 3	Ds BpbS 1.0 114.13
1G1	GS	2- 6-57	N. Platt	1920	2925	88	16 N N	Un TcN 0 47.86
1G2	GS	2- 6-57	N. Platt	1951	2925	162	G 14 T 75	I 1300 I HpbN 1.0 48.31
1K1	GS	2- 7-57	M. S. Emery Ranch	1953	2925	G 12 T 40	I HpbW 0	49.76
1K2	GS	2- 7-57	M. S. Emery Ranch	2925		14 T 2	Dm TcN .5	36.20
1Q1	GS U-5	2- 7-57 1-27-31	M. S. Emery Ranch	2925	26.2	8 N N	Ds T	dry Wp
1R1	GS	2- 7-57	M. S. Emery Ranch	2925		14 T 20	I TapS 1.0	31+
1R2	GS U-4a	2- 7-57 2-20-32	M. S. Emery Ranch W. P. Lang	1910	2925	D 2 L G	Un TcI 1.0 10.4 Tab I Tcr 2.0 10.4 Wp	e 21 3/4

Source of data and other numbers	Type of data of observation	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth: (feet)	Type and diam- eter:	Yield: and power: (gpm)	Pump data well of well	Use point well:	Measuring: point well:	Depth to water: (feet)	Water level (feet)
--	--------------------------------------	---------------------------	---------------	------------------------	---------------------	------------------	-------------------------------	----------------------------------	---------------------------------	-----------------------	------------------------------	------------------------------	-----------------------

T. 3 N., R. 14 W.--Continued.

3/4-1R3	GS	2- 7-57	M. S. Emery Ranch	2925			8	J 1	Dm	TcN	0.5	32.10	C
1-1	CDE-5	2-16-17	C. F. Hedrick	1916	2935.1	216	C 10	C G	720			11.0	
1-2	CDE-6	2-16-17	F. Spencer	1916	2927.4	250	C 12	C G	900			11.0	
1-3	CDE-7				2922.9		D	L	W				
1-4	U-7	7-28-31	Booth and Argus	2926						Hvg	-5.0	19.5	Wp
9F1	GS	2-20-57	Yaeger Ranch	3315			8	L G	S	Ma			
12B1	GS	2- 8-57	B. D. Lackyard	2920			12	T G	I	TcE	1.0	43.24	
12J1	GS U-4	2-16-56 2-20-32		2955	26.1	D 36	N	N	Un	Tbc	1.0	7.83	Wp (7.6)
12K1	GS	2-14-56	J. M. O'Banion	1948	2960	170	RG 10	J 1	Dm	Te	.5	71.63	
12K2	GS	2-14-56	J. M. O'Banion	2965			6	N N	Un	Te	0	15.14	
12Q1	GS U-2	2- 7-57 2-20-32	Curtis O'Banion A. M. Page	3010	D 14	N N	Un, I	Bbc Ter	0	Un, I	0	104.43	
12Q2	GS	2-14-56	Curtis O'Banion	1951	3010	170	RG 8	T 5	Dm, I	TcW	1.0	94.32	

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and size	Pump data	Water level

T. 3 N., R. 4 W.--Continued.

					L	W	Dm	Tbc	0.5 80.1 Wp, W
3/4-13B1	GS U-1	2-16-56 2-20-32	Pittinger Olive, formerly West	3005					
13B2	GS F	2-16-56	Pittinger W. T. Boehringer	3005 2950	T $7\frac{1}{2}$ C 10				
13F1	GS	2-14-56	Delma Thompson	3070	315	14	T 30 700	Tbc, I	141.86
20P1	GS	2-20-57		3210	23.9	D	L W	Un	Tcl 2.0 19.32
21M1	GS	2-20-57		3145	20	D	L W	Un	Tap 0 16.95
23G1	GS	2-18-57		3130		10	L W	Un	Tcs 1.0 111.80
23Q1	GS	2-18-57	G. A. Snyder	3210		I N	Dm	BpbN 1.5	29.94
26B1	GS	2-18-57	G. A. Snyder	3200		10	L 1	I	TccN 1.5 6.65
27H1	GS	2-20-57		3155		14	L W	S TcW	1.0 1.62
28G1	GS	2-20-57		3125	298.0	8	N N	Un Tcs	4.0 .93
28J1	GS	2-20-57		3153		8	L W	S Tcs	1.5 5.53

Table 1
3N/4W

T. 3 N., R. 11 W.--Continued.

3/4-28P1	GS BR-43	4- 5-56 Las Flores Ranch	3168.6	340	10	2	7	S,I	HpbW 1.0	4.8C	C,W
28P2	GS F	2-19-57 Las Flores Ranch 4- 5-56 Carver Investment Co.	3150	10.0	D 14	L	W	Un	Tdp Tbc	0 0	2.50 3.70
31B1	GS	2-19-57 Las Flores School	3225	25.6	D 40	J 3/4		Dm	Tbc	0	24.27 C
31C1	GS	2-19-57 L. Johnson	3220	20.3	D 36	C 5		Dm, I	Tcr	4.0	12.25
31C2	GS	2-19-57 J. A. Richardson	1956	3220	55.2	CG 8	N N	I	Tcn	1.5	19.28 i,wp
31C3	GS	2-19-57 J. A. Richardson	1956	3225	32	cd 8	T E	Dm	Na		
31D1	GS	2-19-57 E. Frie	3240	21.1	cd 18	J 1		Dm, S	TcrW 1.0	7.10	
32C1	GS F-29P1 BR-44	4- 5-56 Las Flores Ranch 11- 6-53 11-11-50 Las Flores well	3187.0	60	8	L W		Dm, S	TccE 3.0 Tc	9.85 12.60	
32D1	GS	2-19-57 Las Flores Ranch	3185	8	J $\frac{1}{2}$			Dm	TcS	1.0	all.78
33G1	GS	2-19-57 R. C. Slining	3220	13.6	D 40	J $\frac{1}{2}$		Dm	TccS 1.0	3.88	H

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth (feet)	Type and diam- eter: (in.)	Pump well yield: (gpm)	Power: (feet)	Measuring: point (feet)	Depth below water (feet)	Water level
3/4-35G2	GS	2-19-57	Nickerson	3230	26.7	D 36	J $\frac{1}{2}$	Dm	TcE 0	Un	1.91	
33G3	GS	2-19-57	Nickerson	3230	7.1	D 60	L G	Dm	Tcc 1.0	Un	.95	
33G4	GS	2-19-57		3230	11.4	D 24	N N	Un	Tcr .5	Un	2.62	
33G5	GS	2-19-57		3235	14.7	D 48	E	Dm	Tcc 0	Un	2.86	
33G6	GS	2-19-57	S. G. Shaffer	3220	16	D N N	J 1	Dm	Tcc 1.0	Un	5.85	
33H1	GS	2-18-57	F. R. McCullough	1952	3235			Un	Na	Un	Na	
33H2	GS	2-18-57	W. Ross	3235	40			Un	Na	Un	Na	
33H3	GS	2-19-57	A. L. Wharton	1955	3240	26.2	D 41 J 1	Dm	TcN 0	Un	5.92	
<u>T. 3 N., R. 4 W.--Continued.</u>												
3/5-11R1	GS	2-21-57		3560	41.0	D	N N	Un	Tcc 0	Un	35.52	
12K1	GS	2-21-57	H. Wildey	1956	31.75	C 9	N N	Un	TcN 1.0	Un	678.62	
12K2	GS	2-21-57	H. Wildey	1956	3475	348.7	CG 8 N N	Ds	Tc 1.0	dry	Table 3N/4W 3N/5W	25

b. Probably perched or semiperched water.

USGS well number	Source of date end other numbers:	Date of observation:	Owner or user	Type of well	Year com- pleted:	Altitude: (feet)	Depth and Type of well:	Use point and Yield: diam- eter:	Measuring: point well: (gpm):	Depth to water (feet):	Water level (feet):		
3/5-13L1	GS	2-21-57	H. Wildcy	1920	3590	56	D	L	W	Dm	TcrE 2.0	51.36	
14D1	GS	4- 5-56	Les Flores Ranch		276	8	L	W	S	Tc	.3	240.85	
F-15A1 BR-42	11- 6-53 11- 3-50	Lugo well		3602.3		V		S	Tc	.3	243.30	W	
20Q1	GS	2-29-57	M. E. Warren	1950	3835	231	C	6	Ts E	Dm	BnCw 1.0	140.87	
22E1	GS	3-27-57		3635		6	G	Un		TcS	1.6	303.5C	
25J1	GS	10- 9-57		3260		6	L	H		Dm	Tbc	.5	15.54
25M1	GS	2-19-57	S. Kelly	1914	3295	30.3	Ca	18	L	Dm	Tcl	.5	a27.12
26L1	GS	3-27-57		3300	22.9	D	48	C	G	I	Tdp	2.0	8.96
27B1	GS	2-29-57	C. Brooks	3435	56.0	D	72	T	½	Dm	Tcr	1.4	47.32
27B2	GS	3-27-57	H. G. Wells	1949	3440	12	D	J	1/3	Dm, S			
27F1	GS	2-29-57		3470	100	C				Dm	Na		
27G1	GS	2-29-57	A. S. Fitzell	3420	140	C	8	T	G	Dm	TcN	2.0	50.97

T. 3 N., R. 5 W.--Continued

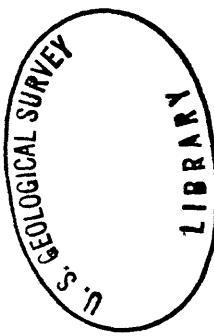
Source of data and other numbers	Date of observation	Owner or user	Type well	Pump data	Water level
USGS well number		com- pleted	Year : Altitude : Depth : (feet)	and Type of well	Measuring: Depth point to water below well (feet) (feet)
			com- pleted	yield : diam- eter : (gpm)	Other data
			com- pleted	power : (in.)	
			com- pleted		

T. 3 N., R. 5 W. --Continued

3/5-26A1 GS	2-29-57	Jane Ringo	1954	3535	80 C 10 T 3/4	Dm	TcS	1.0	61.17
28A2 GS	2-29-57	Jane Ringo		3555	24.6 D 16 N N	Ds			
28A3 GS	2-29-57	Anderson		3555	37.6 D 60 N N	Un	Tbc	0	28.25
28A4 GS	2-29-57	L. A. Cleveland	1948	3530	100 6 L 1	Dm	Na		
28A5 GS	2-29-57	O. P. Oinnerstrum	1947	3530	60 C 8 N N	Un	TcE	.5	49.40
34B1 GS	3-27-57	L. D. Glassy		3440	30 D 48 L N	Un	Tc	1.0	6.97
34B2 GS	3-27-57	L. D. Glassy		3435	30 D 48 J 1/3	Dm	Tc	.5	5.00
36B1 GS	2-19-57	R. Trautsch		D		Dm	Na		

T. 3 N., R. 7 W.

3/7-CB1 GS	3-27-57			5510	6 N N Un	Tbc -4.7	233.29
------------	---------	--	--	------	----------	----------	--------



USGS well number Source of data and other numbers Date of observation Owner or user numbers Year completed Altitude (feet) Depth (feet) Type of well End of completed Type and end of ever Yield (gpm) Power (in.) Pump data Use of well Measuring point Yield (gpm) Power (in.) Water level Depth to water Below level (feet) (feet)

T. 4 N., R. 1 W.

4/1-5C1	GS	12-4-56	S. S. Bor		2948	2980		10	T	G		Dm	TcW	0.5		83.95			
5M1	GS	12-5-56	C. P. Summers		2985	15						Ds					23.4		
5M2	GS	12-5-56	C. P. Summers		2980	4		D	L	W		Ds					23.4		
6E1	GS	12-5-56	Lockhart		2940	20.8	D		L			Ds							
6E2	GS	12-5-56	Lockhart		2960	8	D		L	W		Ds					26.4		
6-1	CDE-166	3-2-17	Lockhart		30	D	C	G									24.3		
7D1	GS	12-5-56			1956	2940	R	8	N	N	Un	TcS	.3		23.20				
7R1	GS	12-18-56	A. E. Rolapp		2940	136	RG	10	N	N	50	FnC	3.4		11.25				
17D1	GS	1- 3-57			2950			12	N	N	Un	TcS	1.3		19.49				
17M1	GS	1- 3-57			1948	3000	1400	R	12	N	N	Un	Tcc	1.0		65.50			
17M2	GS	1- 3-57			3010	1400	C	12	N	N	Un	TcN	.2		78.75				

Source	Date	Type	Pump data	Water level
USGS of data well number	of	Year	well	Measuring:
end	owner or user	Altitude: Depth	and	Depth
observer		com-	Type	Other
number	tion	pleted:	diam-	point
numbers		(feet)	eter:	to water
			Yield:	data
			(gpm)	below lsq:
			(in.) power:	(feet); (feet)

T. 4 N., R. 1 W. ---Continued.

					C	J	Dm	BnC N	
					8	3		Tc	
4/2-1931	GS E3-36	2- 5-54	George McCarthy Mac's Dude Ranch	1951	2968.1			0.6	56.98 C,W
18F2	GS GS BR	1- 3-57 2- 5-54 11-13-50	George McCarthy	1953	2970	151	CG 9	Ts 1	Tcc .6 Tc 1.0
18G1	GS GS	1- 3-57 2- 4-54	A. Turner	1946	2950	54	R 12	J $\frac{1}{2}$	Tcc 1.5 Tc 1.5
19C1	GS	1- 3-57	Arthur Rolapp	1948	2990	194.9	8	N N	TcN .8 Na 145
20H1	GS	1- 3-57			3075	200	12	Ts 1	Dn
20P1	GS	1- 3-57	F. H. Hammel	1945	3125	200	8	L 2	Dm
20R1	GS	1- 3-57	O. M. Curry	1955	3185	308	CG 8	Ts $2\frac{1}{2}$	Dm
								TcE 1.5	TcE 240.54 L

T. 4 N., R. 2 W.

					D	N	N	Ds	
					D	L	W		
4/2-1931	GS CDE-164	12-5-56 1917	John McPherson	1950	2950	24			19.0
- 301	GS	12-5-56	C. M. Barnard	1952	3035	222	C 10	T G 200	TcC .8 TcE 176.50 L

Table 1
F/4 1/29

USGS well number	Source of date and other numbers	Date of observa- tion	Owner or user	Year com- pleted:	Altitude: (feet)	Depth and Type:	Type of well:	Pump data:	Use or Measuring point:	Depth to water:	Other data

T. 4 N., R. 2 W.--Continued

4/2-3Q2	GS	12- 5-56	C. M. Barnard	1923	3035	222	C 6	L G	Dm	Na	C
4B1	GS CDE-156	12- 6-56 1917	E. R. Wheatley		3024.9	195	C 7	N W	Ds		168.0
4E1	GS CDE-153	12- 6-56 3-1- 17	R. L. Reid E. C. Vessey	1915	3027.0	375 450	C 12	A G	Dm, I 550	Ic	4.0 177.0
4G1	GS CDE-157	12- 6-56 1917	E. R. Wheatley	1917	3036.0	20.8	C 6	N N	Ds	Tc	177.4; C 177.0
4Q1	GS	12- 5-56	A. Mendel	1953	3030	505	RG 16	N	720	Un	
4-1	CDE-158	3- 1-17	D. W. Hurlhy	1915	3075.6	500	C 12	A G	360	TcN	1.4 229.93
4-2	CDE-328	1917	E. D. Vessey				D	L W			222.9
5D1	GS	12- 6-56			3040	247	C 6	N N	Un	Na	160.0
5D2	GS	12- 6-56			3035	227	C 8	N N	Un	Na	
5F1	GS	12- 6-56			3055	247	C 6	N N	Un	Na	
5G1	GS	12- 6-56	M. Scoonover	1954	3060	184	C		Dm	Na	

Source of data and other numbers	Date of observation	Owner or user tion	Year com- pleted:	Altitude: (feet)	Depth and Type of well	Type of pump	Pump data	Water level
USGS well number								

T. 4 N., R. 2 W.--Continued.

4/2-5G2	GS	12- 6-56		3055	251	C 6	N N	Un Na
5G3	GS	12-6 -56		3050	231	C 6	N N	Un Na
5H1	GS	12- 6-56	P. D. Martin	1948	3050	256	10	Dm Na
5H2	GS	12- 6-56	Dalley		3055		6 Ts E	Dm Na
5H3	GS	12- 6-56	Paul Martin				Ds	Wp
U-22		2-17-33	A. L. Martin					
CDE-152		1917	A. L. Martin					
5J1	GS	12- 6-56	Grajeda	1951	3055	261	C 12 S G 540	Un 182.4 0 187.0
5L1	GS	12- 6-56			3060		Ts E	Dm Na
5M1	GS	12- 6-56				228.9	C 12 N N	Ds Tc 3.0 Wp
U-21		3- 2-33	A. B. Sheridan					
CDE-150		1917	A. B. Sheridan	1915	3100.0	311	C 12 N N	Mc 2.5 221.0
6D1	GS	12- 7-56	C. A. Stephens	1952	3030	220	CG 8 L W	Dm TcN .4 .4 194.48
6E1	GS	12- 7-56				164.7	C 8 N N	Un Tc O dry CDE-93 3- 4-17 A. J. Lintner 3030.0 C 8 N N 200.0

Table 1
4N/2W

31

¶. 4 N., R. 2 W., --Continued.

4/2-6M1	GS U-20 CDE-92	12- 7-56 1-26-32 1917	H. E. H. E. Walsh	1914	3125.0	340	C 12	L G	297	N	N	Ds Un	TcR	(289.4) 200.0	W.P.	
8A1	GS	12-19-56	McDonald	1915	3110	500	12	N N	Un	TcE	2.0	277.89				
8-1	CDE-151	1917	John McDonald	1915	418	C	N N					255.0				
9E1	GS	12-19-56	C. S. Parker	1948	3110	292.0	C 12	N N	Un	TcS	1.4	248.08	L			
9M1	GS	12-19-56	L. Best	3150	350	R 8	L WG		Dm	TcS	1.0	292.96				
10D1	GS GS CDE-159	11- 5-57 12-19-56 3- 1-17	A. Mendel D. W. Kurlhy	1915	224.3	C 12	N N	Un	TcW	.8	220.37					
10G1	GS CDE-160	12-19-56 3- 1-17	Edison Co. J. W. Beasley	1915	3073.2	550	C 12	A G	316	Ds		.8	216.94			
12G1	GS CDE-162	12-18-56 1917	W. S. Cherry	1915	3058.2	501	C 12	A G		BnC	.3	68				
12H1	GS CDE-163	1- 9-57 1917	W. S. Cherry	2960	43.2	C 12	N N	Un	Ds	Tc	0	dry	63.0			
					70	C 12	L W					62.0				

T. 4 N.; R. 2 W.—Continued

1/2-13A	GS	1-10-57	Frances Hill	1945	2980	225	12	T	G	60	Dm	EpbS	0.5	65.13	L				
	F	4-10-56													65.62				
	F	2-18-56													72.08				
13C1	GS	1-10-57	W. H. Barnes			3010	112	C	8	J	1	Dm	Na						
13D1	GS	1-10-57	L. Penley			3020	150	12	T	G	80	Dm	EpbN	.15	100.05				
13J1	GS	1-10-57				2990		8	J	1	Dm	TclW	1.0	75.80					
14C1	GS	1-10-57	F. Lietold			3040	147	D	N	N	Ds					14.2			
	CDE-161	3- 2-17						D	L	W									
16C1	GS	1-11-57	Pacific Water Co.			3155	545	C	T	40	Ps	Tap	1.0	304.30	C				
16J1	GS	1-15-57				3340		8	L	W	S	Tcc	1.1	155.68					
19X1	GS	1-16-57	L. Earr			3510	256	8	N	N	Un	T:N	1.0	160.47					
20D1	GS	1-15-57	J. A. Miller			1948	3340	235	CG	6	L	Dm	Epb	1.0	199.13	L			
20J1	GS	1-15-57	F. Baum			1953	3390	256	CG	8	L	W	Dm	Na					
		1-22-57	Wilson			3580	820				Dm	Na							
20X1	GS	1-10-57	V. J. Fleming			1947	3460	855	R	8	L	W	1.5Dm	Na	450				

33

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth (feet)	Type and size (in.)	Pump data well	Use of power	Measuring: point (feet)	Depth to water (feet)	Water level
4/2-24K1	GS	1- 9-57	B. Thornton	3200	380	8	L	W	Dm	Tcc	0.6	309.24
30F1	GS	1-15-57	A. Galbois	1940	3640	129	C	8	L	W	Un	HpbS 3.0
36G1	GS	1-15-57	A. Galbois	3870	19	C	8	L	G	Un	Bpb	2.0

T. 4 N., R. 2 W.--Continued.

4/3-1C1	GS	12- 7-56	Thomas	3010					T 15	Dm, I	Na	
1C2	GS	12- 7-56	G. Kendall	3030					8	L	N	Un TcW .5 191.47
1M1	GS	12-11-56	M. Munzinger				C 12	L 3/4	Dm	Tbc	.4	214.57
U-19	U-19	1-26-32	E. D. S. Pope				C 12	L G	90	Tcr -.4	-	204.6 wP
CDE-90	CDE-90	1917	E. D. S. Pope	1913	3037.0	730						196.0
1RL	GS	12- 7-56		3130								
1-1	CDE-91	1917	D. D. Spaid	1914								
2A1	GS	12-12-56	Eulie	3000								
2A2	GS	12-12-56	Pacific Telephone Co. Employees	1953	3015	435	12	T 25	130	Dm, I	Bpb	.65 178.56 F 4N 1 Z 3W

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and diam- eter	Yield (gpm)	Use point (feet)	Measuring point (feet)	Depth to water (feet)	Water level (feet)
4/3-251	GS CDE-88	12-11-56 1917	Ralph Beasley J. F. Olsen	1911	2995.6	180 167	C D	L L	W W	Dm	Na	159.0
2B2	GS	12-11-56	Ralph Beasley		2995.6	249	C 200	8 C 6	N W L	Un	TcS	1.3
2C1	GS	12-12-56	T. E. Dennison	1911	3005	200	C 2990	6 14	W Ts 1	Dm	TcW	1.0
2D1	GS	12-12-56				3000	C 3010	8 C	W Ts 1	Dm	Tcc	-1.0
2F1	GS	12-11-56	M. C. Morey			3000	C 3053.0	8 C 10	W N L	Dm	Tcn	-1.6
2F2	GS CDE-87	12-11-56 1917	T. E. Dennison	1909	2997.6	150.6 180	C C 3053.0	6 6 8	W N W	Ds		159.0
2G1	GS	12-11-56				3010	C 2990	8 C 12	W Ts 1	Un		
2R1	GS CDE-89	12- 7-56 3- 2-17	W. J. Fifield			3053.0	C 3053.0	10	N Ts 1	Ds		213.0
3A1	GS	12-12-56								Dm	Tcc	1.0
3B1	GS CDE-85	12-12-56 3- 3-17	J. Billingsley		2978.9		D D	N N	N	Ds		149.0
3R1	GS CDE-86	12-12-56 1917	C. A. Bonadiman	3030.8	241		C C	6 L	G W	Dm	Na	190.0

T. 4 N., R. 3 W.--Continued.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth and diam- eter:	Type of well	Pump data	Use of well	Measuring point below (feet)	Water level
4/3-4E1	GS CDE-83	11- 2-56	Anderson O. L. Morgan	1913	3010	D	T E L W	Dm, S Na	170.0		

M. 4 N., R. 3 W. --Continued.

4G1	GS	11- 2-56	P. Creolini	1946	3000	R 14	T 50	1800 I	Tap N 1.5	175.70	
4-1	CDE-84	1917	H. W. Fitzpatrick	1912	2992.9	D	N N			155.0	
4-2			Morgan Ranch								L
5A1	GS CDE-97	6-20-56 1917	E. Sanden C. H. White	1915	3002.1	204	C 12	N N L G	72	Un	Tcc O
5A2	GS	6-20-56	E. D. Sanden	1953	3000	C 10	T 15	Dm, I	Tap .5	186.02	L
5A3	GS	6- 7-57	C. C. Koon	1953	3000	C N	N N	Ds			
5C1	GS	6-20-56	P. D. Savage	1955	2970	240	C 8	Ts 1½	Dm	Na	
5D1	GS CDE-70	6-20-56 1917	Apple Valley School	2923.8	160	C 7	N N L W	Un	Na	100.0 -	
5D2	GS	12-11-56	Florence Hopper	1956	2960	191	C 8	L W	Dm	TcS 1.3	164.11 L
5D3	GS	12-13-56	Frank Partridge	1955	2920	169	C 8	Ts 3/4	Dm	Na	

USGS well number	Source of data end other numbers	Date of observa- tion	Owner or user	com- pleted	Type of well	Pump data	Water level
					Year (feet)	Altitude: Depth (feet)	Measuring: point
<u>T. 4 N., R. 3 W.--Continued.</u>							
4/3-5T4	GS	6-6-57	B. L. Claybrook	1956	2920	C 8 T _s 1	Dm Na
5D5	GS	6-6-57	Westley Philake	1956	2920	C 8 N N	Un Na
5L1	GS	6-6-57	Dale McComb	1955	2970	C 8 T _s 1 ₂	Dm TcW 1.0 184.79
- 5L2	GS	6-6-57	Bradbury	1956	2960	8 T _s 1	Dm TcL .7 152.27
5L3	GS	6-6-57	S. V. Graves	1956	2960	C 6 J 1	Dm Na
5M1	GS	5-22-56	F. H. Pope	1946	2935	T 3	Dm TapW 1.0 111.70
5M2	GS	5-22-56	F. H. Pope	1946	2940	351 RG 12 T 50	I I D _s
5R3	GS	1-30-57	W. A. Westphal	1910	2923.4	370 C 12 C G	Dm TcL -3.2 172.8 Wp 80.0
5P1	GS U-31 CDE-82	12-11-56 3-24-32 1917	R. M. Ferguson	1911	2995	N N C N CG 8 L W	Un Na Dm TcS .5 190.45
5Q1	GS	12-11-56	Fred J. Myers	1951	3005	217	

Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude: (feet)	Depth (feet)	Type of well	Pump data	Water level
USGS wcl1 number								
4/3-5Q2	GS	12-11-56	R. E. Pollard	1956	3005	229	C 8 L 1½	5-3/4Dm
5Q3	GS	2- 5-57	R. M. King	1955	2985	211	C 8 N N	TcN 1.3
5Q4	GS	6- 6-57	Clifford	1953	3000		8 Ts 2	175.89 L
5R1	GS	12-12-56	I. B. Jolly	1952	3010	260	10 Ts 1	Dm Tap 1.0
6A1	GS U-44 F-6B1	6-13-56 5-17-34	New Way Laundry A. J. Lintner	1947	2871.91	99	12 Ts 1	TccE-5.3
6A2	GS F-6B1	4- 5-56	A. Lintner	1947	2872.4	119	C 16 T 15	189.48
6B1	GS	6-13-56	J. Pettis	1930	2870	95	16 T 10	Dm, I TccN 0
6B2	GS	6-13-56	K. R. Singler	2875	80	12 J 1	Dm Tbc -5.7	(a) 66.31
6B3	GS	6-13-56		2875		T E	Dm HpbS 1.0	67.33
6B4	GS	6-13-56	G. Short	2880		T 10	Dm, I TapN 2.0	68.42
6B5	GS	6-13-56	S. Leffler	2890	93	12 T 5	Dm, I TccN 0	69.76
6C1	GS	6-21-56	C. W. Cambridge	1956	2875	80	C 8 T 2	Dm TcN 2.0
								60.85

a. Pumping.

c. Water-level measurements in well 6A1 from 1931 through July 1, 1953, are published under well numbers U-44 and F-6B1. Measurements after July 1, 1953, were inadvertently made in well 6A2 but were reported under well number F-6B1. (See tables 4 and 5.)

USGS number	Source of data and other numbers	Date of observation	Owner or user	Type of well	Pump data	Water level
5-21	GS U-43	5-2-56 5-17-34	W. J. Smithson A. W. Phillips	1910	Year com- pleted:	Measuring point below water (feet)
5-22	GS U-43a	2-24-17 6-20-56	A. W. Phillips W. J. Smithson	2966.5 1948	Altitude: (feet)	Depth to water (feet)
				100 2870	Type of well: diam- eter: (in.)	Other data: yield: (gpm); power: (hp); (feet): (feet)

T. 4 N., R. 3 W.--Continued.

5-21	GS U-43	5-2-56 5-17-34	W. J. Smithson A. W. Phillips	1910	8	Ts E	Dm	Tup Ter	1.5	66.62	C, W Wp
5-22	GS U-43a	2-24-17 6-13-56	A. W. Phillips Olin McGuire	2966.5 1955	100 2880	C 10 T 3	Dm	Tup Ter	1.5	a56.1 50.0	
5-23	GS CDE-34	1-30-57 2-24-17	Jess Ranch A. H. Holman	2860	150	L G T 1 1/2	Dm	TcN	.5	50.26	
5-24	GS CDE-68	1-30-57 2-5-57	Olin McGuire H. W. Fredenburg	2833.7 1956	25 2880	C G T 3	Dm	TcN	.5	50.26	
5-25	GS CDE-68	6-13-56 1917	Olin McGuire G. L. Smith	2880	118	T 3	Dm	TcN	.5	50.26	
5-26	GS CDE-68	2-5-57	H. W. Fredenburg	93.7 1956	99	C 8 Ts 1	I	Tbc	2.0	70.55 50.0	
5-27	GS CDE-68	2-5-57	W. Fredenburg	100 1945	99	C 8 Ts 3/4	Dm	TccE	.5	67.82	
5-28	GS CDE-68	2-5-57	A. H. Crawford	114 J 1	114	CG 9 J 1	Dm	Tcc	1.0	76.42	L

a. Pumping.

d. Tape smears.

Table 1

39

34

T. 4 N., R. 3 W.--Continued.

4/3-6K1	GS	6- 7-56	H.L.B.	White		2875		8	J	E	Dm	TcS	1.0	76.75	L		
6K2	GS	2- 5-57	George	Tyler	1951	2880	91	C	8	E	40	Dm	Na				
6L1	GS	5-24-56	Jess	Ranch	1949	2855	350	RG	18	T	20	I	TapN	0	49.83		
6L2	GS	5-24-56	Jess	Ranch	1951	2855	450	RG	18	T	30	I	TcN	0	52.56		
6L3	GS	5-24-56	Jess	Ranch	1954	2885	350	R	24	T	100	I	HpbN	3.0	a86.39		
6M1	GS	5-24-56 5-13-32	Jess	Ranch		100	C	14	T	10	I	Na					
U-39		1917	Harris	Garcelon	1909	2842.9	133	C	12	C	1170	Dm,I	Tc	-8.1	17.4	WP	
CDE-32																16.0	
6P1	GS	5-24-56	Jess	Ranch	1949	2860	200	RG	18	T	40	I	Tap	0	58.47		
6P2	GS	6- 7-56	Jess	Ranch	1948	2860	216	C	12	T	20	Dm,I	TcN	0	49.91	L	
6P3	GS	6- 7-56	Jess	Ranch	1951	2880	96	C	8	J	1	Dm,S	Na				
6Q1	GS	3-15-57			1951	2880		8	rs	1	Dm	TcN	1.0	67.41			
6R1	GS	1-30-57	S. A.	Day	1956	2915	138	C	8	T	1	Dm	BnC	.13	77.08	L	
6R2	GS	1-30-57	B. O.	Mosher	1949	2920	96	C	8	N	N	Un	BnC	.16	81.10	L	

Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Type of well	Type of Measuring point	Depth to water	Water level
--	---------------------------	---------------	------------------------	---------------------	--------------------	----------------------------------	-------------------	-------------

USGS
well
number

and
other
numbers

T. 4 N., R. 3 W.--Continued.

					Type Pump data			
					well	well	well	Water level
4/3-3	GS	3-15-57	W. A. McVeigh	1948	2885	85	C 8	L
6n4	GS	3-15-57	D. B. Lackey	1948	2880	86	T 1	
6-1	CDE-35	1917	A. W. Phillips		2830.5	94	C 12 C G 1944	
7A1	GS CDE-72	1-30-57 2-25-17	Cozara		2880.4	48	D L W	
7D1	CS	6- 7-56	Jess Ranch	1951	2850	225	R 18 T 30	
7G1	GS	5-22-56	H. Watson	1953	2865	168	RG 16 T 40 1500	
7G2	GS CDE-33	5-22-56 1917 U-40 U-40	H. Watson E. Garcelon 6-22-07 2-10-05	1912	2848.8	150 166	Cd 12 C G 1350 T 15 1800 Un	
7K1	GS U-34 CDE-30	5-22-56 5-13-32 1917	C. G. Lewis C. G. Lewis C. C. Lewis		140	Cd 12 T N	Na	
7K2	GS	5-22-56	C. G. Lewis	1956	2870	200	RG 14 T 25 1500 Dm, P	
							Tap	.5
								39.30

Table 1
4N/3W

Source : Date :		Owner or user :		Year : Altitude:Depth :		Type : Pump data :		Water level :	
USGS of data: well number	of and other numbers:	com- pleted:	observa- tion:	com- pleted:	(feet)	and diam- eter:	Type : yield: and (in.) power:	cf point to water (feet);below ls (feet): (feet)	Other depth
4/3-7K3	GS	5-22-56	C. G. Lewis	1948	2070	164	C 14 T _s E	Dm	TcN 0

T. 4 N., R. 3 W.--Continued.

7M1	GS U-35 CDE-31	6- 7-56 5- 5-32	H. D. Carden	1948	2070	164	C 14 T _s E	Dm	TcN 0	
7M2	GS	6- 7-56	H. D. Carden	1947	2860	78	CG 14 T 15	Dm, I	TcE 0	
7M1	GS	6- 7-56	H. D. Carden	2860	100	R 14 T 15	I	BnCw 0	39.78	
7P1	GS CDE-29	1957 2-25-17	I. K. Miller	2861.9	150	C 10 N G	Ds	19.5	36.55	
8B1	GS	12-13-56	Frank Partridge	1949	3020	217	8 T _s 1	Dm	Na	180
8D1	GS	5-22-56	D. Julseth	1922	2915	149	8 T 25	Dm, P	Na	92
8D2	GS CDE-71	1956 1917	Edwin Rhodes	1914	2904.1	164	C 14 T G	Ds	71.0	15.9
8E1	GS	12-13-56	E. C. Bates	1953	2925	166	C 8 T _s 2	Dm	Na	15.1
8E2	GS	12-13-56		2915	8 T _s 1½	Dm	Tee .3	88.27		

Source of data and number	Date of observation	Owner or user	Type of well	Pump Data	Water level
USGS well number		Year com- pleted:	Altitude: (feet)	Use measur- ing in well:	Depth of water below 1s (feet): (feet)
		con- trol:	Depth of well:	point of well:	other data
		year:	(feet)	point of well:	
		power:	(gpm)	below 1s	
		(in.)		(feet): (feet)	

T. 4 N., R. 3 W.--Continued.

4/3-8:11 CDE-73	GS 12-13-56 2-25-17	Kepplinger	2904.3	15 D L W	Ds N N N	66.0
8M2	GS 12-13-56	M. J. Steorts	1955	2920 C 8 T _S 1½	Dm TcE 2.0	99.82
8P1	GS CDE-74	12-12-56 1917 C. F. Ten Eyck	1915	2970 C 14 T G	Ds N 405	dry 132.0
8-1	U-32 CDE-78	7-28-31 3- 1-17 W. C. Harris	1912	3030.9 345 C 14 L G	270 I Tcr 0	197.0 WP 186.2
9A1	GS	12-14-56 B. Kite	3020	G 8 T 3	Dm TcN .9	187.18
9E1	GS	12-14-56 J. M. Hull	1952	3025 G 16 T 125	I Hpb 1.48	198.15 C,L
9G1	GS	12-14-56 Ranchoritos Mutual Water Co.	1956	3020 452 RG 12 T 50	875 Ps TapN 1.28	190.4
9M1	GS CDE-79	12-13-56 Pacific Water Co. 3- 1-17 A. E. Hull	1912	3033.9 687 C 14 C G	495 Ps Tbc .3	211.35 C 188.9
9P1	GS	12-13-56 A. Mendel	3035	T 75	I	TapS 1.1 204.73
9Q1	GS	12-13-56 A. Mendel	1950	3030 494 T 125	I	TapE 1.43 207.07 C,L

F
3-1-3

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted:	Altitude: (feet)	Depth: (feet)	Type of well	Pump data and type	Use of well	Water level below 1s. (feet)
------------------------	--	--------------------------------	---------------	-------------------------	---------------------	------------------	-----------------	-----------------------	----------------	------------------------------------

T, 14 N., R. 3 W.--Continued

4/3-1031	GS	12-14-56	T. G. Cristilly	1956	3035	237	C 8 T _s E	Dm Na	L
10D1	GS	12-14-56	G. Pettit	1955	3020	241	T 5	Dm Na	188
10P1	GS	11- 5-57					14 N N	Un Ter 0	233.73
	GS	12-20-56						Tcr 0	231.97
U-33		1-27-31	Old Hunt place					Rpb 0	221.3
CDE-80		3- 1-17	W. M. Hunt, Jr.						212.0
10R1	GS	12-20-56					12 T 20	Dm PpbN .3	260.71
U-18		1-20-32	M. Riddelson					Dm,I Tpb 1.4	151.0
CDE-81		1917	W. E. Tuising	1917	3090.0	385	C 14 L G 243		138.0
10R2	GS	1- 2-57					12 N N	Ds TcW 1.0	dry
U-18a		3- 3-33						Un Tc 1.0	237.5
11C1	GS	12-20-56	J. Thompson	3060		8 T 5	Dm,S Na		
11E1	GS	1-22-57	Tenopir	1956	3065	260	C 8 J 2	Dm TcE 1.0	231.18
12D1	GS	12-20-56	John Weibel	1951	3095	335	10 T _s 1 9	Dm Tcc .64	253.19
14C1	GS	1-17-57	W. Whitehouse	1956	3215	457.7	C 10 N N	Un Tc 1.0	377.99
15-1	CDE-327					195	C N N		145.0

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Type (feet) (feet)	Type (feet)	Diam- eter (in.)	Yield well (gpm)	Pump data (in.)	Water level (feet)	
4/3-17AL		12-14-56	V. M. Haun	1954	3045	272	C 8	Ts 5	Dm	TcW 0.3	214.31
17BL	GS	12-14-56	H. C. Green	1946	2985	171	C 6	J 1½	Dm	Na	
17B2	GS	12-14-56	G. W. Compton	1950	2995	322	RG 10	L ½	Dm	Na	
17B3	GS	12-14-56	J. C. Everson	1955	2950	157	C 8	Ts E	Dm	TcW .5	138.25
17D1	GS CDE-28	5-22-56 2-25-17	L. Disney D. W. McPherson	1914	2866.8	30.0	10	N N	Un	TcE 1.0	dry 20.6 L
17D2	GS	5-22-56	I. Disney	2875		12	T 5		Dm, I	Na	
17D3	GS	5-22-56	I. Disney	1915	2870	80	14	T 20	Dm, I	Rpb ,4	41.75
17E1	GS U-26	5-15-56 5-17-34	T. J. Devine	1915	2870	150	C 10	N N	Un Tp	Na Tdp	
17G1	GS	12-14-56	A. E. Martinson	1943	2960	136	C 10	L W	Dm	Tbc .4	24.8 wp
17H1	GS	12-14-56	Ranchoritos Mutual Water Co.	1956	3040	600	RG 12	T E	Ps	Na	130.60 L
17H2	GS	12-14-56	Bensen	3045		8	Ts E		Dm	TccW 1.3	219.71

T. 4 N., R. 3 W.--Continued

T. 4 N., R. 3 W.--Continued.

4/3-17L1	GS U-25 CDE-75	12-17-56 1-15-32 2-26-17	W. Widdoway M. Hughes F. E. Harrison	1912	2930 81	120 D L	Cd 12 L W	T 5 W	Dm Tcc	0.91 1.0	102.96 88.5 78.2	Wp Bcl
17M1	GS	5-14-56	W. G. Roberts	1951	2875	145	C 12 N	N 540 Un	Tcc	1.0	45.10	L
17-1	U-29 CDE-27	5-17-34 2-25-17	Zeiger D. W. McPherson		2862.4		C 14 7 L	W	Dm Tc	2.7	26.9 20.4	Wp
18A1	GS	2- 5-57	E. MacGillivray	1956	2875	101	C 8 T	1	Dm Na			L
18E1	GS GS U-28	11- 5-57 4- 5-56 5- 5-32	E. MacGillivray C. O. Evans	1926	2865		C 12 T	G	Hpb Hpb I	1.0 1.0 1.0	47.18 42.78 20.8	W Wp
18E2	GS U-28a	1-31-57 1-15-32			2865	40	6 N	N	Ds Dm		27.2	Wp
18H1	GS	5-15-56	C. Michael	1948	2860	36	N N	N	Ds			dry
18H2	GS	5-15-56	C. Michael	1951	2860	69	C 11 J 3/4	-	Dm Na			L
18H3	GS	6-13-56	C. Cabbage	1956	2860	98	C 10 T 1½	-	Dm Na			43
18H4	GS	6-13-56	C. Cabbage	1950	2860	76	C 8 J 1½	-	Dm Tc	1.0	44.04	43

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Use of well	Pump data	Water level
4/3-18H5	GS	6-13-56	R. C. Badger	1953	2860	66	C 10 J 1½	Dm	Na	L
18H6	GS	2- 5-57	P. V. Reeves	1950	2870	71	C 8 J 3/4	Dm	Na	
18H7	GS	2- 5-57	B. Dunbar	1950	2870	74	C 8 N N	Un	TcN O	43.45
18H8	GS	2- 5-57	B. Dunbar	1956	2870	74	C 8 Ts 1	Dm	Na	L
18R1	GS	5-14-56	B. Basura	1955	2875	120	10 J 5	Dm, I	TcS 1.0	45.08
18R2	GS	5-14-56	A. Massaro	1950	2875	75	C 10 J ½	Dm	TcN O	44.29
18-1	U-27	5-17-34			2868.9		T	Tdp	.3	25.9 Wp
18-2	U-30	5- 5-32			2870.2					23.5 Wp
19H1	GS	1-25-57	A. Massaro	1942	2900	150	10 J 3/4	Dm	Hpb 1.5	55.39
19H1	GS	1-25-57			2920		G T 50	I	Hpb 1.0	138.15
19R1	GS	4-11-56			2885		Dr 2 N N	Ds	Tdp .5	37.1 Wp, W
19R2	GS	4-11-56	Reed		2905	70	10 T 5	Hpb 1.0	54.21	Table 4-N/3W 1-7

T. 4 N., R. 3 W.--Continued.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth: (feet)	Type: well	Pump data	Use:	Measuring: point	Depth	Other
4/3-19-1	U-23 CDE-18 F-19G1	2-19-32 2-26-17	C. W. McLester G. W. McLester	2890.5			L	10	Tc	0	28.3	WP
19-2	CDE-19	2-26-17	G. W. McLester				N	10			22.7	WP
19-3	U-79 CDE-17	1-28-31 3- 6-17	County well	2899.9			N	12	Tc	0	22.7	
19-4	U-12	2-19-32		2890.1			N	12			12.6	dry WP
20M1	GS CDE-26	5-14-56 1917	W. G. Roberts W. C. Roberts	1915	2868.5	155	J	2	Dm	Tcc	1.5	47.02
20H1	GS	10-31-56	H. O. Perry	1946	3080	300	C	12	C	1125		20.0
20K1	GS U-16	10-31-56 12-21-33	W. C. Fricke N. F. Marsh	3000			T	15	Dm, I	Epb	1.0	242.75
20M1	GS	5-14-56	C. Becker	1947	2890	65	C	8	T	1000	Dm, I	BnCW .5
20M1	GS U-14 CDE-23	1-22-57 12-14-33 2-26-17	A. O. Minister Sidney O'Neil	2882.1			N	12	Un	Ds	-5	34.7 24.5
							N	12	Tc			WP T L

T. 4 N., R. 3 W.--Continued.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth (feet)	Type well	Pump data	Use of well	Water level

T. 4 N., R. 3 W.--Continued.

1/3-2C21	GS	4-5-56								
F-2D11		5-11-54	Allison							
U-15		5-17-34	J. M. Allison							
CDE-25		1917								
20Q1	GS	1-22-57								
20-1	CDE-76	1917	N. F. Marsh	1915	2969.0	180	C 12	S	288	
20-2	CDE-24	1917	J. M. Allison		2880.1	70	C 10	N		
21E1	GS	1-18-57	Pacific Water Co.		3030		T 20			
21M1	GS	10-31-56			3085		T 40			
21M2	GS	10-31-56			3085		L G			
21-1	U-17	12-21-33	W. O. Wade	1916	3090.0	650	C 12	L G		
	CDE-77	3-1-17	W. O. Wade							
29A1	GS	10-31-56	L. M. Jones	1953	3080	300	6 T _s 3	Dm	Tcc 0	e264.90
29A2	GS	10-31-56	Riness	1950	3080	300	6 N N	Un	Tc 0	261.71

e. Pumped recently.

Table 1
4N/3W

Source of data and well number	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth of well:	Type of well	Pump data	Water level
USGS well number								
29E1	GS U-10 CDE-22	10-31-56 4-10-56 5- 1-31 2-25-17	W. G. Shaw S. H. Vail Rayburn O. A. Minister	1954 1956 1956 1913	3080 (feet) 120 2891.2	320 14 C 12 C	8 T _s G 12 G	3 D _m I I 1350
29E2	GS CDE-21	4-10-56 1917	S. H. Vail O. A. Minister	1956	2896.3 2890	53.0 D CG 16	14 L T 25	N G 81 I
29E3	GS	1-24-57	S. H. Vail	1956	2890	166 81	60 T	1800 S, I
29M1	GS	4-10-56	S. H. Vail	1952	2935	53.0 92	8 J 1	U _n D _m Na
29M2	GS	4-10-56	S. H. Vail	1952	2920	102 102	10 J 1	D _m TcN 57
29N1	GS	4-10-56	J. Moore	1952	2920	102 92	8 J 1	D _m Na 57
29N2	GS	4-10-56	J. Wiens	1952	2920	102 2915	10 J 12 T 1½	D _m TcN .5 57.89 L
29N3	GS	4-10-56	S. H. Vail					Na
30A1	GS	4-11-56	F. J. Whicher	1948	2900	72 76	12 C 12 T 10	D _m , I HpbN 1.0 D _m TcN 0
30A2	GS	4-11-56	W. Howell	1948	2900	76 100	12 T 12 N N	54.64 L 53.09 L
30A3	GS	1-24-57	C. Smith	1956	2880	100 G 12 N N	Un TcE 3.0	60.45

T. 4 N., R. 3 W.--Continued.

4/3-29A3	GS	10-31-56	W. G. Shaw	1954	3080	320 88	14 T 20	D _m , I ThcN 0 Bbc 0
29E1	GS	4-10-56	S. H. Vail					52.75 38.4 24.3
29E2	GS	4-10-56	S. H. Vail					dry 30.0
29E3	GS	1-24-57	S. H. Vail	1956	2890	166 CG 16	60 T	TapS .56 59.68
29M1	GS	4-10-56	S. H. Vail	1956	2890	81 2935	25 T 25 8 N N	S, I Thc -.5 52.90 f53
29M2	GS	4-10-56	S. H. Vail	1952	2920	92 2920	8 J 1	U _n D _m Na
29N1	GS	4-10-56	J. Moore	1952	2920	102 92	10 J 1	D _m TcN 57
29N2	GS	4-10-56	J. Wiens	1952	2920	102 2915	10 J 12 T 1½	D _m TcN .5 57.89 L
30A1	GS	4-11-56	F. J. Whicher	1948	2900	72 76	12 C 12 T 10	D _m , I HpbN 1.0 D _m TcN 0
30A2	GS	4-11-56	W. Howell	1948	2900	76 100	12 T 12 N N	54.64 L 53.09 L
30A3	GS	1-24-57	C. Smith	1956	2880	100 G 12 N N	Un TcE 3.0	60.45

e. Pumped recently.
f. About an inch of water in well.

Source of data and number	Date of observation	Owner or user of numbers	Year com- pleted	Altitude: (feet)	Depth: (feet)	Type and of well	Pump data of well	Use of well	Measuring point: well	Depth to water	Other
USGS 1-211											
U-9	4-5-56	A. W. Cole	1914	2897.7	4	D	N	Ds	Tc	1.0	dry
F-30E1	5-11-54	A. W. Cole	1913	2898.0	162	C	12	I	Tcr	0	39.5
U-9	5-17-34	A. W. Cole	1914	2897.7	36	D	L	G	Tcr	0	44.8
CDE-16	3-6-17	A. W. Cole	1906	2880	241	T	20	I	Tcr	0	32.8
30D2	1-24-57	A. W. Cole	1906	2880	12	C	6	G	63		
CDE-15	3-6-17	C. E. Hamann	1956	2900	156	Ts	1	Dm	TapW	.5	31.7
3CE1	1-24-57	C. E. Hamann	1956	2900	125	T	30	Dm, I	BpB	.36	64.78
U-9a	1-18-30		1947	2900	102	Cd	12	T	Tbc	1.0	(47.1) wp
30E2	GS	C. E. Hamann	1946	2900	75	C	8	J	TcN	0	64.78
30G1	1-25-57	R. Bragg	1947	2900	102	Cd	12	T	TcE	0	66.14
U-11	2-19-32	A. O'Neill	1946	2900	75	C	10	Dm	TcN	0	53.55
CDE-14	2-26-17	A. O'Neill	1946	2900	75	C	8	J	TcE	0	66.14
30H1	GS	4-11-56 C. Niccum	1947	2900	102	Cd	12	T	Dm	Na	
30Q1	GS	3-8-56 H. R. Geer	1946	2900	75	C	8	J	Dm	Na	
30R1	GS	1-24-57 McClain	1946	2900	75	C	8	J	Dm	Na	

T. 4 N., R. 3 W.--Continued.

4/3-5-57A4	GS	1-31-57	1956	2865	L	W	Dm	Na			
30D1	GS	4-5-56	1956	2865	40.2	8	N	Ds	Tc	1.0	dry
U-9	F-30E1	5-11-54	1956	2865	36	12	C	I	Tcr	0	39.5
CDE-16		5-17-34	1956	2865	720	G	720	I	Tcr	0	44.8
30D2	GS	1-24-57	1956	2865	4	D	N	Ds	Tc	1.0	dry
CDE-15		3-6-17	1956	2865	36	D	L	I	Tcr	0	39.5
3CE1	GS	1-24-57	1956	2865	241	T	20	1000 Un	Tc	0	44.8
U-9a		1-18-30	1956	2865	12	C	6	I	Tcr	0	32.8
30E2	GS	1-24-57	1956	2865	156	Ts	1	Dm	TapW	.5	31.7
30G1	GS	1-25-57 R. Bragg	1956	2865	125	T	30	Dm, I	BpB	.36	61.36
U-11		2-19-32 A. O'Neill	1956	2865	102	Cd	12	T	Tbc	1.0	31.5
CDE-14		2-26-17 A. O'Neill	1956	2865	75	C	10	Dm	TcN	0	16.4
30H1	GS	4-11-56 C. Niccum	1956	2865	75	C	8	J	TcE	0	66.14
30Q1	GS	3-8-56 H. R. Geer	1956	2865	75	C	8	J	TcN	0	53.55
30R1	GS	1-24-57 McClain	1956	2865	75	C	8	J	TcE	0	66.14

n. This well probably has been redrilled. Correlation with CDE number uncertain.

Table 2

Source of data and other numbers	Date	Owner or user	Year completed	Altitude (feet)	Depth (feet)	Type and diameter of well	Pump data	Water level
USGS well number	4-10-56	McClain	1905	10	L	W	Dm	TcC 0.4 54.00
30R3 CDE-20	1-24-57	H. A. Jock	2905.2	54	C 10 L	G 315	Ds	18.0
31B1 GS	3- 8-56	Hawks	2905	C 14 T	15	Un	TcE 2.0	45.64
31B2 GS	3- 8-56	Hawks	2905	J 1/3				
31L1 GS	3- 7-56	W. Hupfeld	1954	2910	300	RG 12 T 25	Dm, I Na	
31L2 GS	3- 7-56	W. Hupfeld	2910	90	12 L	W	Un	TcW 0 39.36
31L3 GS	3- 7-56	W. Hupfeld	2910	85	12 J	2	Dm	Na
31L4 GS	3- 7-56	W. Hupfeld	1951	2910	148	G 12 N	Un	TcW 0 51.89 L
31L5 GS U-8	3- 7-56 1-15-32	W. Krpfield Laughlin	2910	100	14 N	N	Un	TcN 0 45.94
31P1 GS CDE-12	3- 7-56 2-26-17	Lesick I. C. McLaughlin	1905	2910.0	34	C 14 L	Tc 2	36.9 Wp
31P2 GS	3- 7-56	Taylor	2920				Dm	Na

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year of construction	Altitude (feet)	Depth and yield of well	Type of pump	Pump rate	Use of pump	Water level
4/3-31-1	CDE-13	2-26-17	I. C. McLaughlin	1911	2913.5	52 C 8 L G	G	468		20.9

T. 4 N., R. 3 W.--Continued.

32C1	CS	3- 7-56	V. A. Johnson	1955	3040	212 C 8 L G	Dm	Tc	1.0	200.69 L
32E1	GS	3- 8-56	K. M. Meahl	1955	3000	205 8 Ts E	Dm	Na		L
32I1	GS	3- 8-56	P. Staton		3080	8 Ts 1	Dm	TcS	1.0	216.81

T. 4 N., R. 4 W.

1/1-1A1	GS	6- 7-56	Jess Ranch	1949	2370	180 R 18 T 10	Dm, I	TcN	0	21.05
1C1	GS	5-24-56	Jess Ranch		2840	30 C 10 J $\frac{1}{2}$	Dm	Na		
1D1	GS U-73	2- 1-57 4- 1-20			2840	10 J 5	In T	Tc	(10.3)	Wp
1D2	GS	2-1-57	Higrade Materials Co.	1956	2825	50 C 10 T 5	25 In	TcN	1.0	16.44
1R1	GS U-37	5-24-56 3-25-32	Jess Ranch		2850	130 C 18 T 30	I I	TcW Hpb	0 2.5	30.31 12.5 Wp
1-1	U-42	1-31-16			2822.8		T	Tc	(6.4)	Wp Table 1 F4N/3W F4N/4W

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted:	Altitude: (feet)	Type of well:	Pump rate:	Type of well:	Water level

Other
data
below 1
(feet): (feet):

T. 4 N., R. 4 W.--Continued.

4/4-8G1	GS	11- 5-57	Hesperia Land Development Co.	1954	3165	610	RG 14	N	1500 Un
	GS	3- 6-57				21.0	8	N	Ds
12B1	GS	2- 8-57				2840.0		T	TcN
	U-75	1- 7-32						Tc	1.0
12-1	U-75a	4-29-32				2847		T	dry
12-2	U-36	4- 5-07						Tc	dry
13B1	GS	1-31-57	H. I. Pollard	1949	2850	270	G 14	T 25	1295 I
13B2	GS	2- 1-57	H. I. Pollard	1936	2850		16	N	Un
	U-76	1- 7-32						Dm	Tpb
13B3	GS	1-31-57	H. I. Pollard	1936	2850		10	J 1	Dm
13J1	GS	1-31-57	H. I. Pollard	1936	2850	348	16	T 35	1102 I
	U-77	1-26-31				21.3		Ds	Tes
13R1	GS	1-31-57	H. I. Pollard	2850	128.6	16	N	Un	TcW 1.0
	U-78	1- 7-32	Lacey				I	Tal	46.88
								1.4	Wp
									32.0

a. Pumping.

USGS No. 11 number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth and diam- eter: (in.)	Type of well	Pump data and yield: (gpm)	Use of well: (in.)	Measuring point: (feet)	Depth below water: (feet)	Water level

T. 4 N., R. 4 W.--Continued.

4/4-21C1	GS CDE-178	3-15-57	Appleton Land, Water, and Power Co.	1917	3200.0	753	C	6	N	N	Ds	342.0
24G1	GS	1-25-57	Hesperia Water Co.	1947	2960	450	T	14	14	100	Ps	Na
24M1	GS	1-25-57	Hesperia Water Co.	1947	2995	452	G	14	T	100	Ps	Na
25M1	GS F-26G1	3-14-57	Hesperia Water Co.	1947	3040	516	G	14	T	150	Ps	TcS 1.0
26C1	GS	3-13-57	Omart Investment Co.	1956	3025	441	RG	14	N	N	1860 Un	TcS 2.0
26Q1	GS F-26M1	3-14-57	Hesperia Water Co.	1948	3105	385	G	14	T	150	1400 Ps	TcE .5
26E1	GS F-28C1	3-13-57	Hesperia Water Co.		3280	709	T	14	100	400 Ps	TapN 1.0	451.12 C,W
29F1	GS	3-13-57	Hesperia Water Co.	1955	3330	700	G	14	T	200	1000 Ps	
29-1	GS	3-13-57	Appleton Land, Water, and Power Co.	1924	3365	3103	R	N	N	N	Ds	L
35D1	GS	3-14-57	Hesperia Water Co.	1946	3175	706	G	12	T	100	900 Ps	Tc .5

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Type of well	Pump date	Use of well	Measuring point below water (feet)	Depth to water (feet)
4/4-36Q1 CDE-11	GS	2- 6-57	I. C. Black	2927.0	C	14	T	40	1300 I
36Q2	GS	2- 6-57	I. C. Black	2925	C	14	T	125	1300 I
36Q3	GS	2- 6-57	I. C. Black	2923	C	14	T	150	1300 I
36Q4 CDE-9	GS	2- 5-57	I. C. Black	2923	C	14	N	N	Un
36R1	GS	2- 6-57	I. C. Black	2920	C	14	N	N	Un
36R2	GS	2- 6-57	I. C. Black	2920	C	14	N	N	Un
36R3 CDE-10	GS	2- 6-57	I. C. Black	2918	C	14	N	N	Un
					202	C	14	N	N

T. 4 N., R. 4 W.--Continued.

4/5-1K1	GS	3- 5-57	C. C. Lackyard	1939	3230	400	R	6 L	G
1K2	GS	3- 6-57	R. S. Ward	1948	3233	500	R	6 L	3
						20	Dm	Na	

T. 4 N., R. 5 W.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth and yield (feet)	Type of well	Pump data	Water level
4/5- 1P1	GS	3- 6-57	E. Ward	1945	3255	420	C 6 L 1	Dm	TcS 0.5 404.19
3G1	GS	2-19-57	S. M. Lockwood	1955	3310	565	C 10 Ts 2	14 Dm	Tcr -4.2 459.75 L
5RL	GS CDE-174	2-19-57 4-11-18	C. R. Hudson Verde Ranch	3390.0	644	C 6 L N	Un	Na	510.0 L
12P1	GS CDE-177	3- 8-57 4-12-18	Secord and Black	1914	3351.5 3351.5	435.0 572	C 12 L N	Ds	dry 490.0
18M1	GS CDE-301	2-21-57 1917	F. L. Thomas		3605	330	D N N	Ds	dry dry
22H1	GS CDE-172	11- 6-57 2-28-57	L. J. Hampton	1914	3551.9	802	C 12 N N	Un	TcW -5.2 670.86
27F1	GS	2-27-57	LeRoy Rolar		3665	503	C 8 N N	Un	Na
28M1	GS	2-27-57	Mrs. Bessire	1947	3685	300	C N N	Ds	L
31KL	GS	2-26-57	C. J. Willman	1948	3955	263.3 R 6	N N	Ds	dry L
34A1	GS	2-27-57	Hunt	1913	3675	800	C 10	Un	Na 750

Sec. 4 N., R. 5 W.--Continued.

Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth and yield (feet)	Type of well	Pump data	Water level	
4/5- 1P1	GS	3- 6-57	E. Ward	1945	3255	420	C 6 L 1	Dm	TcS 0.5 404.19
3G1	GS	2-19-57	S. M. Lockwood	1955	3310	565	C 10 Ts 2	14 Dm	Tcr -4.2 459.75 L
5RL	GS CDE-174	2-19-57 4-11-18	C. R. Hudson Verde Ranch	3390.0	644	C 6 L N	Un	Na	510.0 L
12P1	GS CDE-177	3- 8-57 4-12-18	Secord and Black	1914	3351.5 3351.5	435.0 572	C 12 L N	Ds	dry 490.0
18M1	GS CDE-301	2-21-57 1917	F. L. Thomas		3605	330	D N N	Ds	dry dry
22H1	GS CDE-172	11- 6-57 2-28-57	L. J. Hampton	1914	3551.9	802	C 12 N N	Un	TcW -5.2 670.86
27F1	GS	2-27-57	LeRoy Rolar		3665	503	C 8 N N	Un	Na
28M1	GS	2-27-57	Mrs. Bessire	1947	3685	300	C N N	Ds	L
31KL	GS	2-26-57	C. J. Willman	1948	3955	263.3 R 6	N N	Ds	dry L
34A1	GS	2-27-57	Hunt	1913	3675	800	C 10	Un	Na 750

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth and item:	Type of well	Pump data	Use of well	Measuring point below water (feet)	Water level at measuring point (feet)
4/5-35C1	GS CDE-170	3-13-57 1917	F. H. Hunt	1913	3613.9	816	C 12 L	12 N N	Un	750.0	

T. 4 N., R. 5 W.--Continued.

<u>T. 4 N., R. 6 W.</u>											
4/6-15J1	GS CDE-171	2-21-57 1917	S. Zacssek	1912	3800.0	909	C 12 L	12 N N	Un	Na	869.5
23B1	GS	2-22-57	J. C. Dahle		3825	h258	C 8	12 N N	Un		
23M1	GS	2-21-57	T. C. Cope		3920	1030	12	N			
26P1	GS	2-26-57	Cheney		4045	h282.6	C	N			
35C1	GS	2-26-57	Bullock		4095	h125.9	C 14	N			

T. 4 N., R. 7 W.

n. Drilling	GS	12- 7-56	Stella Wyman	1951	3965	700	C 8	N N	Un	(J)
8M1	GS	12- 7-56	Schwartz	3910	900	C 6	N N	Ds	(J)	
8M2	GS	12- 7-56	Marcus Jones	1955	3925	394.1	C 12	N	Ds	dry

T. 4 N., R. 7 W.—Continued.

T. 5 N., R. 1 W.

5/1-29M1 GS 11-30-56 O. L. Roberts
3C17 GS 5-23-57 William Logan

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth of well	Type of well	Pump date	Water level

T. 5 N., R. 1 W.--Continued.

5/1-31B1	GS	11-30-56	William Logan	3050	220	8	L	W	Dm
31C1	GS	11-30-56	William Logan	3075	252	Ts	2		(d)
31H1	GS	11-30-56		1956	3005	182.5	4	N	Bn
31J1	GS	12- 4-56	Z. V. McBride	1937	3000	134	9	Ts 1½	Tc
32M1	GS	12- 4-56	Z. V. McBride	1946	2980	185	14	T 30	Bn
32P1	GS	12- 4-56	Hazel Grigsby	1950	2960	80	CG 10	L W	1.0
32P2	GS	12- 4-56	Hazel Grigsby	1950	2955	80	CG 10	N	105.19
									119.39 L
									Na
									2.5
									130.08
									197.61

T. 5 N., R. 2 W.

5/2- 3P1	GS	1-17-57		3195	270	12	N	Ds	
3-1	DGT-344	1917	A. G. Trendell				N		298.0 C
4A1	GS	1-17-57	E. A. Payne	1957	3180	137	C 8 N	Ds	Total 5N/2W
									15N/1W
									5N/2W

d. Type smears.

YGS num. ber	Source of data etc.	Date of observa- tion	Owner or user	Year com- pleted	Altitude: (feet)	Depth well	Type of well	Pump data	Water level
14-1	ECI-343	1917	H. F. Anders						

T. 5 N., R. 2 W.--Continued.

5/2-4-1	ECI-343	1917	H. F. Anders						
5R1	GS	1-18-57	Newton Bass	3130		6	L		
6F1	GS	1-18-57	Rudy Gelaski	1955	3180	8	Ts 1½	Dm	Na
6D1	GS	1-18-57	M. S. West	1954	3120	365	R	9	L
8A1	GS	1-18-57		3100		C	12	N	Dm
9D1	GS	1-18-57		3115	275.8	C	7	N	Na
10-1	DGT-345	1917				Un	Tc	2.6	231.83
12-1	DGT-346	1917						4.0	
18D1	GS CDE-137	1-18-57 1917	W. H. Bronson				Ds	25.0	
18G1	GS	1-18-57	Fred Cain	1953	3000	200	C	8	132.0
19K1	GS	1-15-57	Smith	1945	3010	176.5	C	8	145
19M1	GS	1-15-57	T. A. Drake	1945	2960	130	R	N	170.21
							Un	TcS	1.0
							Un	Tap	121.66

Table 1
5N/2W

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: cov. (feet)	Depth: (feet)	Type and size	Pump data	Use	Measurin- g point and (feet)	Depth below water (feet)	Water level	
5/2-19M2	GS	1-15-57	T. A. Drake	1952	2960	200	RG	6	TS	1	Dm	Tap	1.0
19M3	GS	1-22-57	F. B. Robinson	1951	2960	202	CG	8	TS	3/4	Dn	Na	
19M4	GS	1-22-57	J. N. DeGuire	1947	2960	151	C	8	J	1	Dm	TcN	.5
19M1	GS	1-15-57	C. V. Bennett	1945	2965	149	RG	8	N	N	Un	Tc	.3
19N2	GS	1-15-57	C. V. Bennett	1952	2965	214	RG	8	TS	1	Dm	Tap	1.0
19-1	CDE-329	1917	F. H. Nett				D		N	N			98.0
19-2	CDE-330	1917	Hitchcock				D		N	N			100.0
25A1	GS	11-30-56	L. W. Luley	1950	3280	245.6	C	N	N	N	Ds		
25A2	GS	11-30-56	Baldridge	1956	3210	257.8	C	12	N	N	Ds		
30D1	GS	11-15-56	H. Meacham		2960.0	84.2	C	10	N	N	Ds		
30D2	GS	11-15-56	Hyland		2955	545.4	C	14	N	N	Un	BnC	1.0
31M1	GS	11- 9-56	M. Faust	1951	2975	236.4	C	10	N	N	Un	TcW	1.0

M. S. N., R. 2 M. --Continued.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Type of well	Year com- pleted	Altitude: Depth (feet)	Type of yield: meter	Type of power: (in.)	Pump date	Use of well	Measurin, point well:	Depth below water (feet)	Water level
5/2-32F1	GS CDE-154	11-29-56 3-3-17	R. Nefferd E. Deasley		3025.7	46.4	C	12	N	Ds			170.0

T. 5 N., R. 2 W.--Continued.

32G1	GS CDE-155	11-29-56 3-3-17	R. Nefferd J. B. Davis		3011.5	200	C	10	L	W	Ds		160.7
32K1	GS	11-29-56	R. Nefferd		1948	3020	350	RG	16	T	60	600	I
32M1	GS	11-29-56	L. Dillenbeck		1956	3040	258	CG	6	Ts	1½	Dm	Tcc
32P1	GS	11-29-56	Robert Murphy		1951	3025	570	RG	12	T	60	I	Bpb
33L1	GS	11-29-56	Carl Becker		1956	3040	242.5	8	N	N	Un	Tc	1.0
33N1	GS	11-29-56	R. M. Sickles		1948	3035	297	G	6	Ts	2	Dm	Tcc
33M1	GS	11-29-56			3030	227.6	12	N		Un	Tc	1.0	161.25

T. 5 N., R. 3 W.

5/3-2N1	GS CDE-141	4-16-57 1917	J. S. Nation		C	6	N	N	Ds			108.0
2-1	CDE-140	3-4-17	E. H. Keller		D	N	N					116.7

Table 1
5N/2W
5N/3W
63

Source of data and other number well number	Date of observation	Owner or user	Year com- pleted	Altitude: Depth (feet)	Type and dimensions: field and elevation	Pump data cf point well (Feet) power (gpm); (in.)	Type well	Pump data cf point well (Feet) (feet)	Water level
USGS well number									
3C1	GS	4-17-57 G. L. Van Antwerp	1948	220.5	C	T 1	Dm	Na	
3E1	GS	4-17-57 R. Lewis			14	T 15	I	BpbN O	157.6
	GS	4- 5-56	Lewis well				Dm, I	BpbN O	
	BR-31			2914.2					
	F-3D1								
3G1	GS	4-17-57 L. Geerton	1947	2025	187.0 C 9 J 1		Dm	TcN .5	98.35
3H1	GS	4-16-57 M. Simich	1956	2930	172 RG 9 Ts 1½		Dm	TcS .3	91.22
3J1	GS	4-16-57 A. J. Young	1952	2940	115 C 8 L W		Dm	BncW .6	85.88 C
3M1	GS	4-17-57		2911		Ts E	Dm	Na	
3Q1	GS	4-17-57 Antonio Bioletto	1949	2917	107 CG 8 T 1½		Dm	Na	
4A1	GS	4-17-57 H. Tams	1954	2920	301 R 8 T 30	I	Hpb .65	106.21	
4B1	GS	4-18-57 H. Searloos	1956	2920	RG 12 T 15	I	Hpb .8	92.06	
4G1	GS	4-17-57					Ds		
	CDT-143	3- 5-17 G. B. Holbrook		97	D L W				72.8

T. 5 N., R. 3 W.--Continued.

USGS well number	Source of data of well	Date of recording	Owner or user of well	Type of well	Pump rate	Type of well	Water level
				Year com- pleted	Altitude: (feet)	and yield: water:	Measur- ment; point below 1s
				(feet)	(feet)	(gpm); well power: (hp); (in.)	Depth data (feet); (feet)
							Other

T. 5 N., R. 3 W.--Continued.

				L	W	Dm	Na
5/3-4J1	GS	4-17-57	Iverson Ranch	1940	2913		
4L1	GS	4-18-57	George McCarthy	1955	2917	RG 12	T 5
4-1	CDE-144	1917	G. B. Holbrook	1909	94	C 7	L W
5A1	GS	4-18-57	H. Saarloos	2920	151.6	10 N	N
5H1	GS	4-18-57	H. Saarloos	2920	183.9	12 N	N
5Q1	GS	4-25-57	W. Rawe	1947	2927	C	E
5R1	GS	4-18-57	A. H. Bakovic	1950	2920	162	J 1
6M1	GS	4-22-57	A. B. Edmonds	2960	3	D	N N
7H1	GS	4-22-57		1949	2945	6	N
7H2	GS	4-22-57	R. Agee	1947	2940	12 L	W
7-1	CDE-148	1917	G. A. Ground	1917	133	D	N N
8G1	GS	4-23-57	A. Fleming			N N	Na
	CDE-129	3-5-17	M. M. White	90	D	L W	88.0

Table 1
5N/3W 65

USGS well number	Source of data and observation numbers	Date of observation	Owner or user	Year corr. plotted	Altitude (feet)	Depth (feet)	Type and diameter of piped	Type and yield meter (gpm)	Use of well (1.)	Measuring point well (feet) (ft.)	Depth to water below 1sd: (feet) (feet)	Water level		
8-1	CDE-125	1917	Robert Cook	1917	2925.0	125	C	10	L	G	Ds	109.2		
8-2	U-56 CDE-126	1-20-31 1917	Robert Cook	1917	2918.0	170	C	N	N	Tcr	1.8	104.3		
8-3	CDE-130	1917	J. J. Hill	1917	2950.9	90	D	N	N	Wp	106.0			
9D1	GS	4-23-57	J. Mrzena	1951	2920	203	CG	10	T	2	Dm	Na	72.0	
9D2	GS	4-25-57	J. Mrzena	1945	2920	125	C	8	L	H	Un	TcW	.6	86.50
9G1	GS	4-23-57	C. Myers	1948	2910	179	C	12	J	1	Dm	TcW	1.0	78.75
9G2	GS	4-23-57	T. W. Darrow	1946	2915	165	6	Ts	E	Dm	Na			
9J1	GS U-54 CDE-132	4-23-57 4-29-32 2-28-17	F. A. Fletcher F. A. Fletcher	1917	2905.5	213	C	7	N	18	Ds	Tc	.5	76.2
9-1	U-55 CDE-131 F-9R	2-17-33 3- 5-17	F. A. Fletcher	1910.0	458	C	C	G	G	Tbc	1.0	88.2	WP	77.4
													89.1	

T. 5 N., R. 3 W.--Continued.

T, 5 N., R, 3 W. --Continued.

6/3-1CG1	GS	4-23-57	M.	MacNayage	1949	2900	153	R	8	T _B	1	Dn	Tcc	1.0	73.79	
1CG2	GS	4-23-57	L.	H. Corfman	1950	2900	103	CG	8	T	2	Dn	Na			
10K1	GS	4-23-57	M.	Tracy	1915	2903.6	218	C	12	L	N	Un	Tcc	2.0	78.61	
	CDE-134	1917	J.	W. Kyle				C	12	S	G	135			72.0	
10K2	GS	4-23-57	M.	Tracy		2904		J	E			Dn	Na			
10M1	GS	4-23-57	O.	S. Overholt	1902	2905.5	85	D	L	G		Ds			77.5	
10M1	GS	4-24-57	M.	C. Wightwick	1946	2903		L	W			Un	Tcc	.6	83.36	
10M2	GS	4-24-57	R.	Lambrix		2903						Dm	Na			
10P1	GS	4-23-57	J.	B. Brooks	1957	2905	171	RG	9	N	N	Un	TcN	.7	80.91	
10P2	GS	4-23-57	A.	Jost	1956	2903	150	RG	8	T _S	½	Dm	Bnc	.8	79.03	
10P3	GS	4-23-57	D.	Kiley	1956	2905	152	RG	9	T _S	1	25	Dm	BnC	1.0	78.38
10-1	CDE-135	3- 5-17	J.	F. Fitzsimmons		80	D	N	N							77.6

Table 67
5N/3W

T. 5 N., R. 3 W.—Continued.

5/3-11A1	GS	4-24-57	Schullstrom		2943		Ts	E		Dm	Na			
11A2	GS	4-24-57			2935		R	8	T	3	Dm	TcS	1.0	98.31
11B1	GS	4-24-57			2930		L	H			Dm	Tc	.4	94.69
11C1	GS	4-24-57	L. H. Coffman		1947	2915	153	C	L	1	Dm	Na		
11C2	GS	4-24-57	A. Cavrse		2910	105		8	Ts	E	Dm	Na		
11D1	GS	4-24-57	G. Bonewacie			2915			8	Ts	E	Dm	TcS	1.0
11F1	GS	4-24-57	A. Fields		1955	2915	93		8	T	5	Dm	Na	74.91
12A1	GS	4-24-57	F. C. Mitchell		1912	2994	205.5		12	N	N	Un		
12F1	GS	4-24-57	W. Hunton						N	N	N	Ds		
	CDE-139	1917	M. Liebold			2950.9		D	N	N				
12F2	GS	4-24-57	W. Hunton		1952	2950		14	Ts	E	Dm	Tcc	.4	93.74
12H1	GS	4-24-57	F. Mitchell								N	N	Ds	
	CDE-136	3-4-17	E. D. Mitchell		2965.9		C							126.0

Source	Date	Type	Year	well	Type	Pump rate	Water level
USGS well number	of data and other numbers	of owner or user	com- pleted:	Altitude: Depth (feet)	and Type of yield:	Use point (feet)	Measur- ing point below well (feet)
5/3-1232	GS	4-11-57	F. Mitchell	1953	2973	172	L

T. 5 N., R. 3 W.--Continued.

12-1	CDE-138	1917	C. M. Abbeys	2947.3	127	D	N
13D1	GS GS	4-24-57 4-5-56		2930	6	L	W
14M1	GS CDE-117	4-25-57 1917	Hatch	2906.6	D	N	Ds
14E1	GS CDE-116	4-25-57 4-4-17	E. D. S. Pope	1913	2913.0	92.5	C
14G1	GS	4-25-57		2916	C	8	N
14K1	GS	4-25-57	R. G. Patton	2916	6	Ts	1
14K2	GS	4-25-57	R. Colbern	1951	2915	T	2
14K3	GS	4-25-57		2915	42.0	6	N
14N1	GS	4-25-57	S. Miller	2926.0	85.6	D	N
					D	L	W
						Ds	
						Dry	
							87.3

Table 1
5N/3W

USGS well number	Source of data and other numbers	Date of observation	Owner or user	com- pleted	Year (feet)	Altitude: Depth (feet)	Type and diam- eter: (in.)	Yield: (gpm)	Use of well and power: (in.)	Type of point below water (feet); (feet)	Water level

T. 5 N., R. 3 W.--Continued.

5/3-14-1	U-52a CDE-114	4-29-32 3- 3-17	N. A. Graffin		2916.0	92	D	L	G	Tcr	(79.2) W 80.0
15A1	GS	4-26-57	Courtis Marshall		2917	260		6	L	W	Dm
15B1	GS	4-26-57	C. Walters		2918	100	R	9	Ts	1	Dm
15D1	GS	4-26-57	L. Birkett	1949	2918	120	CG	6	L	W	Dm
15D2	GS	4-26-57	R. Oliver		2917			8	C	1	Dm
15G1	GS	4-26-57			2922				L	H	Un
15H1	GS	4-26-57			2922			10	Ts	E	Dm
18F1	GS	4-30-57	Apple Valley Ranchos Water Co.			C	14	T	40	275	Ps
	GS	4- 5-56	Apple Valley Ranchos Water Co.							HpbS 1.7	123.69 C,W
U-57	3- 2-33 CDE-123	2-27-17	J. D. Rumiston	1913	2908.0	464	C	14	L	N	Tcp 1.0 105.4 Wp 97.0
18R1	GS	4-26-57	Apple Valley Ranchos Water Co.				C	12	N	N	Un TcE 1.0 m63.73
CDE-120	2-27-17	A. E. Dennis			2929.4	184	C	12	N	N	Tab 25 125.8

m. Measurement verified.

Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude: (feet)	Depth well	Type of well	Pump data	Water level
183S 1911 Foster								
18-2 U-58 CDE-122	4-29-32 2-27-17	Cochran	2933.5	144	D	L		143.0
18-3 CDE-124	1917	J. M. Raphael	2933.5	142	D	N	Tcr 0.1	134.1
19A1 GS	4-26-57	Apple Valley Ranchos Water Co.	2935	550	RG 16	Ts 150	Ps 826	Tap -5.0
19E1 GS	11- 5-57 4-30-57		2875	155.8	G	8	N	100.53
19E2 GS	4-30-57	G. Whitney	1947	2875	160	C	8	Ts 3
19M1 GS CDE-59	4-30-57 1917	F. C. Snyder M. L. Foster	2835.0	100	C	L	T $\frac{7}{2}$ G 360	Dm, I Hpb .2 61.38 dry dry
20F1 GS CDE-119	4-30-57 1917	M. W. Minor	2890	4	147	D	N N	Dm, I Hpb .2 61.38 dry dry
20P1 GS	4-30-57		2930			12	L 3	Dm TcSE 1.0 155.19
20-1 CDE-118	1917	M. E. Gibson	138	D	L	W		

T. 5 N., R. 3 W. --Continued

USGS well number	Source of data, end of observation numbers	Date of observation	Owner or user	Year comm- enced operated	Altitude: (feet)	Depth: (feet)	Type and size: of well	Pump acts	Use of well	Measur- ing point to water	Water level

T. 5 N., R. 3 W.,--Continued.

5/3-22A1	GS	11- 5-57	R. Werner	1946	267	12	T	20	Dm, I	Tap	1.2
	GS	5- 1-57								Tap	1.2
	CS	4- 5-56								Tap	1.2
	F	12- 8-55								Tap	1.2
	BR-32	11- 7-50	Rothwell well		2923.6				Dm, I	Tap	1.2
											90.55
22A2	GS	5- 1-57	R. White	1947	2925	133	Ca	8	J	1	Dm
											Na
											98
22E1	GS	5- 1-57	C. E. Van Horn	2941.5	30.5	12	N			Ds	
	CDE-128	2-28-17									107.7
22H1	GS	5- 1-57	R. White	2930	129	8	L				
22J1	GS	5- 1-57	B. A. Ondo	1952	2940	420	RG	12	T	25	Dm, I
											BnC
22J2	GS	5- 1-57	I. Ward	1954	2940	130	CG	C	E		Dm, In Na
22M1	GS	5- 1-57	L. Ward	1952	2940		J	2		Dm	Bpb
	CDE-106	2-28-17	H. C. Decker	1909	2944.7	722	C	10	L		
22Q1	GS	5- 1-57	White	2940		8	T	2	Dm	TcN	.6
											107.7
											113.20

a. Pumping.

Total
S.W.

Source of data and Owner numbers	Date of observation	Owner or user	Year con- placed	Altitude: (feet)	Depth and drawn: (feet)	Type of well	Pump data	Type of Macurit well	Water level
--	---------------------------	---------------	------------------------	---------------------	----------------------------------	--------------------	--------------	-------------------------------	-------------

T. 5 N., R. 3 W.--Continued.

5/3-22-1	U-53	4-29-32							
	CIE-107	3- 2-17	N. Elmer						
23B1	GS	5- 2-57	H. C. Forsberg	1947	2920	153	RG 6 L	Dm	Tcc .5
23B2	GS	5- 2-57	G. Thompson	1955	2920	177	RG 8 Ts 1	Dm	TccW .7
23C1	GS	5- 2-57	H. L. Farnham	1949	2925	c 6 J 1½		Dm	TcE .2
23F1	GS	5- 2-57	Meadows	2930		8 Ts 1½		Dm	TccW .7
23G1	GS	5- 2-57		2925	122.1 C	6 N N		Un	TcS .8
23H1	GS	5- 2-57	B. W. Cowan		2920	8 C 3/4		Dm	Tcc .7
23H2	GS	5- 2-57	T. V. Smith	1947	2925	153 c 8 T 7½		Dm, I Na	L
23H3	GS	5- 2-57	H. Holter		2920		Ts ½	Dm	Na
23H4	GS	5- 2-57			2920	8 J 1		Dm	Na
23H5	GS	5- 2-57			2920	8 Ts 1		Dm	TcS .74
23Q1	GS	5- 2-57	B. F. Caddie	1955	2930	204 RG 8 Ts 1	291	Dm	91.30
								Dm	99.32 L
								Dm	103.8 101.9

Table 1
5N/3W

Source of data and well number	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Pump data	Use of well	Measuring point to water	Depth (feet)	Water level	
USGS well number												
5/3-23Q2	GS	5- 2-57	M. Woodbury	2930	169	8	Ts	½	Dn	Tcc	1.0	103.48
23RL	GS	5- 2-57	F. G. Goes	2930	RG 10	T	5	Ps	Tap	2.0	96.82	
23R2	GS	5- 2-57	L. L. Unmack	2930	8	Ts	1	Dm	Na			
24B1	GS	5- 3-57	E. Riebe	1955	2955	158	CG 10	J	3	Dm	TcS	2.0
24D1	GS U-52 CDE-113	5- 2-57 4-29-32 1917	Verde Ranch	2920	80.5	12	N	Ds		c122.41	Wp	
24D2	GS	5- 2-57	M. Schmoller	1955	2920	216	RG 8	J	½	Dm	TcE	1.4
24D3	GS	5- 3-57		2920	197	RG 8	T	5	Dm, I	Na		
24E1	GS CDE-112	5- 3-57 3- 4-17	Harlan	2920	155	C 12	N	N	Ds		81.8	
24E2	GS	5- 2-57	L. J. Cowan	1954	2920	220	RG 10	T	10	I	Hpb.	1.0
24E3	GS	5- 2-57	L. J. Cowan	1954	2920	250	C 12	Ts	½	Dm	Tcc	0
24F1	GS	5- 3-57	W. C. Brixey	1953	2925	150	C 8	Ts	½	Dm	Bnc	.7
												94.51

T. 5 N., R. 3 W.--Continued.

Pumped recently.

Source		Date		Type	Pump data		Water level
USGS well number	of date end other numbers	of owner or user	com- pleted:	well	well	well	well
5/3-2472	GS	5- 3-57	C. Jones	2920	10 T 5	Dm, I	98.01
24H1	GS	5- 3-57	J. P. Zimmerman	2935	10 T 2	Dm	Na
24M1	GS	5- 3-57	B. B. Matthews, Jr.	1950	8 Ts 3	Dm	98.32 L
24M1	GS	5- 3-57	R. Douglas	1920	12 Ts 3/4	Dm	96.63
	GS	4- 5-56	Douglas well	2927.7	W	Dm	104.70
24P1	GS	5- 3-57	H. B. Jones	2935	E	Dm	W
24-1	CDE-111	3- 2-17	Rau	1917	183 C 12 N	Dm, S	87.1
25A1	GS	11-15-56		2950	8 J E	TcE	.8
25C1	GS	11-15-56	A. Schlessler	2935	G 10 T 15	Dm, I	112.81
25C2	GS	11-14-56		2935	10 T 7½	Dm, I	.5
25D1	GS	11-15-56	McGinty	1947	152 R 8 J 2	Dm	104.56
25D2	GS	11-15-56	J. Holme	1946	2930 203 G 8 Ts 1	Dm	99.24
25D3	GS	3-26-57	R. E. Pollard	1957	2930 159 C 6 Ts 1	Dm	.5
						TcC	101.51
						Tc	LN/3W

T. 5 N., R. 3 W.,--Continued.

Source	Date	Owner or user	Year com- pleted:	Altitude: Depth (feet)	Type and diam- eter:	Yield: (gpm)	Measure: Depth point :to water : data below land: (feet) : (feet)
5/3-2472	GS	5- 3-57 C. Jones	1920	2920	10 T 5	Dm, I	98.01
24H1	GS	5- 3-57 J. P. Zimmerman	1950	2935	10 T 2	Dm	Na
24M1	GS	5- 3-57 B. B. Matthews, Jr.	1950	2923	8 Ts 3	Dm	98.32 L
24M1	GS	5- 3-57 R. Douglas	1920	2927.7	12 Ts 3/4	Dm	96.63
	GS	4- 5-56 Douglas well			W	Dm	104.70
24P1	GS	5- 3-57 H. B. Jones	1917	2935	E	Dm	W
24-1	CDE-111	3- 2-17 Rau		2950	8 J E	Dm, S	87.1
25A1	GS	11-15-56		2935	G 10 T 15	Dm, I	112.81
25C1	GS	11-15-56 A. Schlessler		2935	10 T 7½	Dm, I	.5
25C2	GS	11-14-56		1947	152 R 8 J 2	Dm	104.56
25D1	GS	11-15-56 McGinty	1946	2930 203 G 8 Ts 1	Dm	99.24	
25D2	GS	3-26-57 R. E. Pollard	1957	2930 159 C 6 Ts 1	Dm	.5	
						TcC	101.51
						Tc	LN/3W

Table 1
75
5N/3W

USGS well number	Source of data and other numbers	Date	Owner or user	Year com- pleted	Altitude:Depth (feet)	Type of diam- eter:	Pump data	Type well	Use of well:	Measuring point (feet):	Depth below water (feet):	Water level

T. 5 N., R. 3 W.--Continued.

5/3-25E1	GS	11-14-56	Winters		2940	200	E	Dm	Na			
25G1	GS	11-15-56	M. Faust	1951	2940	180	G	8	N	Un	Tcc	1.0
25H1	GS	11-15-56	M. Faust	1956	2940	500	G	12	T	20	I	Tap .4
25H2	GS	11-15-56	M. Faust	1951	2940	186	G	10	N	Un	Tap	114.54
25K1	GS	11-14-56			2950		E	Dm	Na			
25K2	GS	11-14-56	C. O. Dask	1948	2955	168	RG	6	L	2	Dm	Na
25L1	GS	11-14-56			2945			Dm	Na			
25L2	GS	11-14-56	G. Von Gruben	2945	160	8	Ts	3/4		Dm	Tcc	1.0
25M1	GS	11-14-56	J. P. Bellott	1950	2940	142	9	Ts	1	35	Dm	
25M2	GS	11-14-56	T. J. Bennett	1948	2940	175	C	8	Ts	2	Dm	Tc .5
25R1	GS	11- 9-56	Charles Kunz	1954	2970	303	RG	8	Ts	5	275	Dm
25R2	GS	11- 9-56	De Villneuve	1954	2970	265	R	8	L	W	Dm	TcN 1.0
												142
												145.84

c. Pumped recently.

77
Table 1
 $5N/3W$

T. 5 N. 2 R. 3 W. --Continued.

Source of data and number	Date of observation	Owner or user	Year (feet)	Altitude: Depth (feet)	Type of well	Pump data	Use of well	Water level Measuring point below 1s. (feet)	Other

T. 5 N., R. 3 W.--Continued.

3/22-2941	GS	10-30-56	Newton Bass	2965	T	7½	Ps	Hpb	2.0	160.33
29-1	CDE-103	1917	K. Evans	1915	2968.0	207	C	12	L	G 135
30E1	GS	10-30-56	Cox	1954	2840	14	T	20	Dm, I	Hpb 1.0
30M1	GS	6-21-56	W. Pattison	2845.8	93	C	12	T	15	540 I
	CDE-62	2-24-17	W. B. Ames		C	12	C	G		
30M2	GS	6-21-56	W. Pattison	1944	2850	100	C	12	T	40 900 I
30N3	GS	6-21-56	W. Pattison		100	I	BnC	O		58.37
U-48		6-2-32								
CDE-61		2-24-17	Victor Ranch	1905	2845.8	500	C	12	C	G 1125
30-1	CDE-63	2-24-17	W. B. Ames	2848.0	100	I	TcW	O		47.6
31B1	GS	6-21-56	W. Pattison	1954	2860	228	CG	16	T	40 1400 I
31D1	GS	6-21-56	W. Pattison				Ts	1	Dm	Na
U-47		3-24-32	Pacific Farm Lands Co.						Dm, I	Hpb 1.33
CDE-60		2-24-17	E. P. Dewey	1903	2850.0	545	C	8	C	G 1125
										28.27 Hpb
										23.5

i. Tape smears.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year con- tinued	Type well	Pump data	Water level	
				Altitude (feet)	Depth and Type of well	Measuring point well	Depth below water (feet)	
5/3-31D2	GS	6-21-56	W. Pattison	1946	2850	98	10 T 20 720 I Tap 1.0 67.58	
31E1	GS	6-21-56	Stoddard Jebb	2855		T 75	P Hpb .5 60.98	
31E2	GS	6-21-56	C. W. Cambridge	1942	2855	96 C 14 T 15 540 I	Hpb 1.0 69.18	
31E3	GS	6-21-56	C. W. Cambridge	1956	2855	80 C 8 T 3	Dn TcE 1.5 59.06	
31E4	GS	6-21-56	J. Davies	1951	2850	79 Cd 12 Tb E	Dn Na	
31Q1	GS	6-20-56	E. J. McElroy	2865		T 2	Dn Hpb 1.0 64.51	
31Q2	GS	6-20-56	E. J. McElroy	2860	118 G 16 T 30	Dn, I Bnc .5	72.02	
31Q3	GS	2- 8-57	E. J. McElroy	1957	2850	92 C 8 N N	Dn	62 L
31R1	GS CDE-66	6-20-56	V. Odle L. C. Bailey	1912	125	T 20	Dn TcE 0 64.39	
31R2	GS	6-20-56	V. Odle	1955	2870	198 RG 14 N N 1844 Un	Bnc 0 64.19	
31-1	CDE-64	1917	W. C. Smith			C 12 N N		
31-2	CDE-65	2-24-17	S. L. Wheatley	2863.8		C 12 C G	45.3	

T. 5 N., R. 3 W.--Continued.

Source of data	Date of and observa- tions numbers	Owner or user	Year com- pleted	Altitude (feet)	Depth of well	Type of well	Pump data	Use of well	Measure- ment point to water (feet) below level	Depth of well	Water level (feet)
-------------------	---	---------------	------------------------	--------------------	---------------------	--------------------	--------------	-------------------	---	---------------------	-----------------------

T. 5 N., R. 3 W.—Continued.

3274	GS	11-29-56	Robert Abbott	1947	2935	501	T	10	I	Na	C,L				
32D2	GS	11-28-56	J. P. Both	1952	2955	165	C	8	L	3/4	Dm	TcS	0.5	(d)	
32H1	GS	4- 5-56	Newton Bass				T	15	Dm	I	Hpb	.8	168.50	W	
	BR-35	11-14-50							Dm	I	Epb	.8	162.9		
	CDE-101	2-27-17	Theresa Smith	1915	2986.8	269	C	12	N	N			151.8		
32L1	GS	10-30-56	J. Godshall		304	14	T	25	Dm	I	Hpb	.5	184.53	C,L	
	U-45	1-27-31	Thmsen	1912	2934.7	300	C	14	T	G	630		(169.9)	Wp	
	CDE-100	1917	M. F. Thmsen						Dm	I	Tal		164.0		
32M1	GS	10-30-57	M. M. Brady	1952	2985	300	10	N	N	Un	TcE	1.5	179.36	L	
32-1	CLE-99	1917	W. Paine		2934.5	167	D	L	W				160.0		
33M1	GS	11- 2-56					D	N	N	Ds					
	CDE-98	2-17-17	T. J. Anderson	2987.3	167	D	N	N					157.4		
33M1	GS	11- 8-56	Newton Bass		3000		T	15	Dm	Tap					
33Q1	GS	11- 8-56	Realtton	1932	2995	81	10	L	W	46	Un	Na			
33R1	GS	11- 8-56	Fish		2985		T	5	Dm	Na					

81
Table 1
5N/3W

d. Tape smears.

Source of data and other numbers; Date of observation; Owner or user; Year completed; Altitude (feet); Depth (feet); Type of well; Yield of well (gpm); Power (in.) ; Water level (feet); Measuring point (below lake) ; Dept. of water; Other data.

T. 5 N., R. 3 W.—Continued.

5/3-33-1	CDE-96	1917	L. H. Clock	1913	2985.2	512	C	12	N	Dm	Hpb	0.6	151.1	WP	
33-2	U-46	1-	7-32	Comwell			T								
34C1	GS	11-	8-56		2665		8	L	W	Dm	TcE	.7	148.03		
34F1	GS	11-	8-56	2-28-17 A. M. Byron	1912	2967.0	207.3	8	N	Un	TcW	.5	147.90		
34M1	GS	11-	8-56	Pacific Water Co.	1951	2985				Ps				128.5	
34-1	CDE-326	1917	L. Harris	344		C	N	N					187.0		
35C1	GS	11-	8-56	Pacific Water Co.	1954	2955	500	RG	12	T	40	1152	Ps	123 C,L	
35G1	GS	11-	9-56	A. L. Cooley	1951	2960	410	R	10	N	N	447	Un	126 L	
35G2	GS	11-14-56			2955		10	N	N	Un	Thc	.5	129.63		
35M1	GS	11-	9-56	J. Cotner Cotner's well	1946	2984.0	200		8	L	½	Dm	TcW	.2	156.92 C,W
35N2	GS	11-	9-56	G. Mosser	2970		8	L	3/4	Dm	TcN	.7	(a)	Tal	

d. Tape smears.

Source of data and other number	Date of observation	Owner or user	Type well	Pump data well	Water level
103S well number	11- 9-56	A. L. Carpenter	Year com- pleted:	Altitude: Depth (feet) : (feet)	Measure- ment: point to water : (feet); below bottom : (feet)
			and tax-	Type of well	Depth data
			er:	yield:	Other data
			(pm);	well:	
			(in.);	power:	
				: (pm);	

T. 5 N., R. 3 W. --Continued.

5/3-35P1	GS	11- 9-56	A. L. Carpenter	1950	2985	E	Dm	Na
55P2	GS	11- 9-56		1946	2985	L	1	Un
35D1	GS	11- 9-56		2955		G 14	N	Un
						Tcc	1.0	127.74

T. 5 N., R. 4 W.

5/4-3C1	GS F	4- 9-57 9- 1-55	E. W. McBeth	1954	2720	249 C 8 L 1	Un	Tcc 1.0 Tcc 1.0	36.42 40 C
3C2	GS	4- 9-57	R. E. Clark	1956	2720	52 CG 8 J $\frac{1}{2}$	Un	Tcl 1.0	39.90
3C3	GS F	4- 9-57 9- 1-55	E. W. McBeth	1955	2695	68.8 CG 8 N N	Un	TcN 3.8 19 C	17.73
3F1	GS	4- 9-57	L. D. Walker	1952	2695	22 D 48 C 1	Dm	Tcr -3.0	9.37 C
3F2	GS F	4- 9-57 9- 2-55	Hill		2694	40 8 J 1/3	Dm	TcS 1.0 13	11.78
3F3	GS F	4- 9-57 9- 2-55	Richard Lindsey	1954	2700	15 Dr 2 J E	Dm	Tc 0 9	6.77 C

Table 1
5N/3W
51/4W

83

M. 5 N. 2 R. 4 W. --Continued.

5/4-3F4	GS	4- 9-57	J. White			2695		E	I		C	
3I1	GS F	4- 9-57	Judd			1955	2699			Ds	6	C
3P1	GS	4- 4-57	H. E. Anderson			2712	32	D 48	J 5	Dm,I	0.5	11.20 C
3-1	CDE-265	1917	S. Rogers			2708.6		C L	W			14.6
4B1	GS	4-10-57	Southwestern Portland Cement Co.	1954	2690	350	R 16	T 20	298	In	TcN	1.6
4C1	GS	4-10-57	Southwestern Portland Cement Co.	1951	2695	160	C 16	T 20	950	In	BnC	.5
4G2	GS	4-10-57	Southwestern Portland Cement Co.	1935	2690	350	C 10	T 20	600	In	Rpb	.8
4K1	GS	4-11-57	M. Weaver		2725	5.6 D	N	N	Dm	Tcr	1.0	flowing
4Q1	GS	4-10-57	Mc Isles		1955	2710	16	CG 10	N	I	TcW	0 flowing
4Q2	GS	4-10-57	Mc Isles		1955	2710	110	C 10	N	Un	TcN	1.0
4Q3	GS GS	11- 6-57	L. Luke		2708	48	8 J	1/4	Un	-TcE	.6	7.82
		4-10-57								-TcE	.6	7.13

CDE-270 1917

Source : Date : Type : Pump data : Water level :
 of data : of : well : used : Measuring: Depth : Other
 USGS and : Owner or user : completed : com- : type : point : to water : data
 well and : observation : (feet) : (feet) : diam- : well : below 1s :
 number : other : tion : numbers : numbers : : : (feet) : (feet) : (feet) : (feet) :

T. 5 N., R. 4 W.--Continued.

8/14-2Q1	GS	3-20-57	Victorville County Water District	1953	2918	450	C 12 T 50 451	Ps	Hpb	2.0	a125.21	L	
8R1	GS	3-20-57	Victorville County Water District	1955	2908	615	RG 14 T 75 641	Ps	Tap	1.0	e159.71?		
9G1	GS	4- 5-57	H. F. McDowell	1947	2840	256	C 6 N N	Un	TcN	.5	95.39		
9H1	GS	4- 3-57	L. W. Brown	1947	2750	78.2	RG 6 J E	Un	TcN	1.0	29.70		
9H2	GS	3-21-57	Victorville County Water District	1916?	2720	158	15 T 30 353	Ps	Hpb	2.0	a23.35	C	
9K1	GS	3-20-57	Victorville County Water District	1948	2860	303	CG 16 T 50 453	Ps	Hpb	1.5	106.69	C,L	
9R1	GS	3-21-57	Victorville County Water District	1937	2757	225	CG 12 T 30 362	Ps	Na		C		
9F2	GS	4- 4-57	Victorville High School	1934	2760	201	C 14 T 7½	Ps	Tap	0	16.96	L	
10C1	GS	4- 4-57	Wm. Hartman	1931	2715	33	D T 10	Dm, I	Tbc-12.0	23.25	C		
10C2	CDE-263	1917	G. Smith		2714.0	59	C 14 C E	3					
10E1	GS	4- 4-57	AT and SF RR		2720	195.6	15 N N 366	Un	Tap	0	14.10	L	
	CDE-325	1917	AT and SF RR		1913	200	C C E				10.0	C	
10E2	GS	4- 4-57	AT and SF RR		1922	2720	317	16 T 20 450	In	Tap	.5	13.85	15N/4W

a. Pumping.
e. Pumped recently.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	com- pleted	Year of com- pletion	Altitude (feet)	Type of well	Pump data	Type of well	Use and dimen- sions	Measuring point to water (feet)	Depth below water (feet)
5/4-10E3	GS	4- 4-57	AT and SF RR		1938	2720	40	16 N N	300	Un	Na	1
10F1	GS CDE-264	4- 4-57	E. Doulch			2715.8	39	Cd	14 N N	Un	Na	10.5
10F2	GS	4- 4-57	R. Dolch		1944	2720	35.0	cd 14 C	7½	Dm, I	TcN	-9.9
10F3	GS	4- 4-57	R. Dolch		1940	2720		C 12 T 1		Dm	Bpb	.5
10F4	GS	4- 4-57	R. Dolch			21.8	CG 10 N N		Un	TcN	.5	16.22
10L1	GS CDE-262	4- 4-57	A. E. Perry F. Busch	1917	2719.6	25	D 16 J 3		Dm	Bnc	.5	8.53
10L2	GS	4- 4-57	A. E. Perry	1953	2720	85	RG 12 T 7½	I	Bnc	.5		8.0
10M1	GS U-61	4- 4-57 6-15-32	Troxell and Mann	1928	2767.6	52.8	Cd 14 J ½	Dm	Tcc	2.15	e44.97	a
10M2	GS	4- 9-57	W. H. Julian	1939	2735	38	6 Ts E	Un	Tcc	0		18.73
10M3	GS	4- 9-57	A. Chantry Ice Co.	1924	2730	75	Cd 10 C 3	35 In	TcrS	.2		24.01

T. 5 N., R. 4 W.--Continued.

- a. Pumping.
e. Pumped recently.

USGS well number	Source of data and number	Date of observation	Owner or user	Type of well	Year ccu- pled:	Altitude: (feet)	Depth to water: (feet)	Type and yield: cf per min.	Use point: cf per min.	Measure- ment: below level: (feet)	Water level	
5/4-10N1	GS	3-21-57	Victorville County Water District	1956	2800	425	RG 14	T 30	1363 Ps	Tap 1.0	e152.98	C,L
10N2	GS	3-21-57	Victorville County Water District	1945	2800	300	CG 12	N	144 Un	Na		
10N3	GS	4- 2-57	Anne Weiss	1941	2762	195	Ca 8	L	W	Dm	TcrS .3	19.89 L
10-1	CDE-269	1917			2770.9		D	N	N			48.2
11J1	GS	4- 5-57	G. Newton		2860	208	12			Ds		L
11L1	GS	4- 5-57	A. Pratt	1955	2790	75	C 12	N	N	Un	TcS 3.0	52.28
11M1	GS	4- 5-57	G. Cooper	1942	2770	60	C 12	Ts 3/4		Dm	TccE 1.8	43.11
11N2	GS	4- 5-57	G. Cooper	1954	2740	1.8	C 12	N	N	Un	Tc 0	3.47
11N3	GS	4- 5-57	G. Cooper	1942	2785	75	C 8	J 1		Dm	Tc1 1.0	58.79
11P1	GS	4- 5-56	A. Pratt				8	L	W	Dm	TcE 1.6	56.78 W
U-59		3-22-32	Lee Saul		2788.3	65				Dm	Tc 2.6	52.7 C,Wp
11P2	F	4-30-57	Apple Valley Ranchos Water Co.							Hpb	1.0	51.48
	GS	4- 5-57								Hpb	1.0	a76.75
	F	12-18-56								Hpb	.4	49.78 C
	GS	4- 5-56								Hpb	1.0	49.9
	U-59a	3-22-32								Hpb	.4	27.5 Wp 107

T. 5 N., R. 4 W.--Continued.

11J1	GS	3-21-57	Victorville County Water District	1956	2800	425	RG 14	T 30	1363 Ps	Tap 1.0	e152.98	C,L
11L1	GS	4- 5-57	A. Pratt	1955	2790	75	C 12	N	N	Un	TcS 3.0	52.28
11M1	GS	4- 5-57	G. Cooper	1942	2770	60	C 12	Ts 3/4		Dm	TccE 1.8	43.11
11N2	GS	4- 5-57	G. Cooper	1954	2740	1.8	C 12	N	N	Un	Tc 0	3.47
11N3	GS	4- 5-57	G. Cooper	1942	2785	75	C 8	J 1		Dm	Tc1 1.0	58.79
11P1	GS	4- 5-56	A. Pratt				8	L	W	Dm	TcE 1.6	56.78 W
U-59		3-22-32	Lee Saul		2788.3	65				Dm	Tc 2.6	52.7 C,Wp
11P2	F	4-30-57	Apple Valley Ranchos Water Co.							Hpb	1.0	51.48
	GS	4- 5-57								Hpb	1.0	a76.75
	F	12-18-56								Hpb	.4	49.78 C
	GS	4- 5-56								Hpb	1.0	49.9
	U-59a	3-22-32								Hpb	.4	27.5 Wp 107

a. Pumping.

e. Pumped recently.

USGS well number	Source of data and observer number	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth of well	Type and size:	Pump data	Use of well	Measuring point: below water (feet):	Depth of point: below water (feet):	Other data

T. 5 N., R. 1: W.--Continued.

5/4-12F1	GS	4- 5-57	W. Peabody	1948	2860	139	10	N	N	Un	TcN	0.5	98.21			
13C1	GS	3-29-57			2915	394.3	G	14	N	N	TcW	1.1	152.01			
13E1	GS	3-29-57	F. E. Chambers	1935	2830	306	C	16	T	7½	297	I	BnC	.9	87.0	C
13E2	GS	3-29-57	R. S. Osborn	1946	2800	63.5	A	8	T	5	100	Dm,I	Tc	1.0	48	
13E3	GS	3-29-57	Robertson		2815		6	Ts	2		Dm	TcE	1.0	64.46		
13F1	GS	3-29-57	Apple Valley Building and Development Co.		2835		G	16	T	15	I	HpbS	1.0	all0.0		
13J1	GS	3-28-57	E. L. Horton	1951	2815	176	RG	14	T	30	450	Dm,I	Hpb	3.0	62.35	L
13M1	GS	3-28-57	W. E. Hartman	1950	2800	124	Rd	12	T	25	612	I	Na	38	L	
13M2	GS	3-28-57	F. Johansson	1950	2805	116	RG	12	T	15	Dm,I	Na	52	L		
13N1	GS	3-28-57	K. Hartman	1954	2810	110	RG	8	T	5	I	Tap	.6	858.39		
13N2	GS	3-28-57	G. L. Walton		2810		8	J	3		Dm	Bpb	.5	62.87		
13N3	GS	3-28-57	W. E. Hartman	1950	2805	127	RG	8	T	7½	180	Dm,I	Na	48		

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude: (feet)	Depth: (feet)	Type and diam- eter:	Yield: (gpm)	Use of well:	Measuring point to water (feet):	Depth below lsu: (feet):	Other data
------------------------	--	--------------------------------	---------------	------------------------	---------------------	------------------	-------------------------------	-----------------	--------------------	---	--------------------------------	---------------

T. 5 N., R. 4 W.--Continued.

5/4-13Q1	GS	3-28-57	W. E. Hartman	1949	2820	118	RG 12 T 15	623	I	TcW	0	a76.6 L
14P1	GS CUE-37	3-27-57 4-12-17	Kemper Campbell Ranch Verde Ranch	2751.5	222.2 260 C	10 N 10 N	C 10 C 10	50	I	TcW	0	flowing flowing
14P2	GS CDE-39	3-27-57 4-12-17	Kemper Campbell Ranch Verde Ranch	2750.2	17.5 92 C	10 N 10 N	C 10 C 10	N	Un	TcS	.5	+.21 flowing
14P3	GS CDE-38	3-27-57 4-12-17	Kemper Campbell Ranch Verde Ranch	2748.6	350	C 10 C 10	N N	297	I	Na		flowing
15C1	GS U-62 CDE-40	3-29-57 5-15-31 4-12-17	Kemper Campbell Ranch Verde Ranch Verde Ranch	2765.0	175	C 10	T 7½	400	Dm, I	TcN	0	e22.84 flowing Wp flowing
16E1	GS	4- 2-57	L. W. Young	1948	2870	159	RG 6 J 3	3	Dm	Na	92	L
16M1	GS	3-20-57	Victorville County Water District	2945	402	T 50	441 Ps	Ps	Tap	1.0	e171.21	
16M2	GS	3-20-57	Victorville County Water District	1950	2940	R	T 15 200 Ps	Ps	Tap	.5	156.49	

- a. Pumping.
- e. Pumped recently.

Table 1
5N/4W

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: (feet)	Depth: (feet)	Type: well	Pump data	Type: well	Measuring: point	Depth: to water	Other data

T. 5 N., R. 4 W.--Continued.

5/4-16Q1	GS U-63 CDE-182	3-21-57 2-19-30 2-24-17	Appleton Land, Water, and Power Co.	2848.3	861	C 14 T G	315	Ds	Tc	dry 0.7	32.3 29.0	W _P L
19J1	GS	3-19-57	Victorville County Water District	2990		RG 14 T 75	147	Ps	Tap	1.0	205.57	
20B1	GS	3-20-57	Rublio Corp.	1953	2945	G T 15	169	Ps	Hpb	0	153.15	
21A1	GS	3-21-57	J. Brocker	1955	2925	200 C 8	N N	Un	Tcc	1.0	151.89	L
21A2	GS	3-27-57	C. Bailes	1952	2875	149.0 C 8	N N	Un	Tcs	.8	100.49	
21A3	GS	3-27-57	L. F. McFadden	1947	2860	156 C 8	Ts 1	Dn	Tcc	1.3	88.93	
21A4	GS	3-27-57	T. Taylor	1947	2925	C 8 L	G	S	Tcl	2.0	163.50	
21B1	GS	3-21-57	J. Brocker	1949	2870	160 C	L ½	Dn	Na			
21B2	GS GS	11- 6-57 3-21-57	C. Stewart	2875		8 N N		Un	TcE	.6	86.81	
21D1	GS	3-21-57	A. Pflath	1954	2940	168 RG 8	L 1	Un	Na		85.85	

USGS well number	Source of data and other numbers:	Date of observation:	Owner or user	Type of well:	Year com- pleted:	Altitude (feet)	Depth (feet)	Type of pump:	Yield: power: (gpm): (in.):	well and meter: :(feet):	Use of well: :(feet):	Measuring point to water (feet):	Water level (feet):
------------------------	---	----------------------------	---------------	---------------------	-------------------------	--------------------	-----------------	---------------------	--------------------------------------	-----------------------------------	--------------------------------	---	------------------------

T. 5 N., R. 4 W.--Continued.

5/4-21E1	GS	3-21-57	C. Austin	1947	2890	126	C	8	J	1	Dm	TcS	0.9	a104.63
21E2	GS	3-21-57	Vititow		2890		L	3/4			Un			
21F1	GS	3-21-57	Warren		2935	154		8	Ts	1	Dm	BnC	1.0	a137.51
21G1	GS	3-22-57	R. Sells	1946	2920	165		9	L	W	Dm	TcI	1.2	135.08
21G2	GS	3-22-57	C. Luster		2910			8	T	2	Dm			
21G3	GS	3-22-57	R. Thomas		2920			8	L	E	Dm			
21G4	GS	3-22-57	R. Thomas		2920						Dm			
21G5	GS	3-22-57	Galloway	1941	2930	174	C	8	T	1	Un	BnC	.4	142.57
21H1	GS	3-22-57	M. J. Jeremiah	1948	2900	120	C	6	L	3/4	Dm			
21H2	GS	3-22-57	H. Ziecer		2900		C	8	L	3/4	Dm			
21H3	GS	3-22-57	House		2890			8	T	3	Dm	TcW	1.0	108.28
21H4	GS	3-27-57	C. Williams	1947	2910	150		6	L	1	Dm	Na		
21H5	GS	3-27-57	Beaman Brothers	1952	2895	165	C	8	T	3	Un	BnC	.7	111.29

a. Pumping.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude:Depth (feet)	Type and yield	Pump data	Type well	Measure- ment: point well: (feet)	Water level Depth below 1s: (feet)
5/4-21H6	GS	3-27-57	R. Wright	1950	2980	120	C 8 J 1 $\frac{1}{2}$	Dm	TcS 0.58	97 4 $\frac{1}{2}$
21J1	GS	3-22-57	F. Kern	2935	225	12 T 5	Ps	Na		
21J2	GS	3-22-57	F. Kern	2935	126.1	8 N N	Ds			dry
21J3	GS	3-22-57	D. Trump	2920	140	8 L W	Dm			
21J4	GS	3-26-57	L. Ward	2920		T 3	Un	Na		
21J5	GS	3-26-57	Roesner	2925		T 2	Dm	Na		
21K1	GS	3-22-57	H. Hand	2945	180	C 6 L W	Un	TcW .8	162.18	
21K2	GS	3-22-57	J. Julian	1950	2940	168 C 10 Ts 3/4	Dm	Tcc .6	143.72	
21Q1	GS	3-22-57	E. L. Farrington	2940	196	8 Ts E	Un	TcW 1.5	144.5 $\frac{1}{2}$	
21Q2	GS	3-22-57	E. L. Farrington	1949	2955	146 8 L 3/4	Dm	Na		
21R1	GS	3-22-57	S. Higgs	1932	2950	208 C 6 Ts 3/4	Dm	Tcc .7	166.75	
21R2	GS	3-22-57	T. Zanetti	2950	240.6	8 N N	Un	TcN .4	162.82	

T. 5 N., R. 4 W.--Continued.

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude: (feet)	Depth: (feet)	Type and diam- eter:	Pump data of yield and power: (gpm) (in.)	Water level well	Use of well	Measure: C: Dept.: point :to water: below 1: (feet): (feet)	Other data
------------------------	--	--------------------------------	---------------	------------------------	---------------------	------------------	-------------------------------	--	---------------------	-------------------	--	---------------

T. 5 N., R. 4 W.--Continued.

24-1	CDE-51	GS	3-28-57	Clarke Shaw		14.8	14	N	N	D ₆	T _c	0.3	52.9	Wp					
	U-50	GS	3-22-32			72	C	14	L				53.0						
	CDE-56	GS	2-17-17	W. and C. Shaw		2815.7													
24J1	GS	GS	3-27-57	O. M. and M. Co.		2835	240	RG	14	T	15	470	D _m , I	B _{nc}	1.3	52.79			
	6-14-56	GS	6-14-56											Hpb	1.5	a60.49			
24J2	GS	GS	3-29-57	O. M. and M. Co.		2865	86.0	RG	12	N	N	U _n	T _{cS}	.5	83.21				
	6-14-56	GS	6-14-56	O. M. and M. Co.		2830	100		14	T	10	270	I						
24L1	GS	GS	3-29-57	O. M. and M. Co.		2825			14	T	7½		D _m , I	T _{cN}	.4	59.28			
	6-14-56	GS	6-14-56											T _{cN}	.4	59.71			
24L2	GS	GS	3-28-57	Wendt		2825		G	12	T	15	25	I	T _{cW}	.4				
	6-13-56	GS	6-13-56	O. M. and M. Co.		2840		CG	16	T	25	970	I	Hpb	1.0	a63.05			
24R2	GS	GS	3-28-57	Apple Valley Grange		2840			8	T _s	½	D _m	B _{nc}	-4.2	59.73				
	6-14-56	GS	6-14-56										B _{nc}	-4.2	a63.17	61.54			
24-1	CDE-57		1917. W. and G. Weldon			2801.7	300	C	12	C	G						50.0		

93

a. Pumping.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and size of well	Pump use and power (hp.)	Measure- ment point (below water level) (feet)	Water level
------------------------	--	---------------------------	---------------	------------------------	--------------------	-----------------	-----------------------------------	--------------------------------------	--	-------------

T. 5 N., R. L. W.--Continued.

5/4-25G1	GS	6-13-56	O. M. and M. Co.	2785	235	14	T 15	620	I	Tap 0
25H1	GS	6-13-56	O. M. and M. Co.	135	14	T	E	342	Dn, I	
U-49		5-26-22							Dn, I	Ter 1.25
CDE-58		1917	W. A. Foster	1907	2833.0	100	C 10	G 900		46.75
										48.0
25Q1	GS	6-13-56	DeMott	2795	100	CG 14	T 15		Dn, I	
25R1	GS	6-13-56	Mildred Rivers	1945	2840	400	CG 8	T 40	Dn, I	Bpb 1.4
										a14.46
26G1	GS	2-27-57	Kalin Co., 8			10	T 15	50	I	
	GS	6-6-56							Ls	0
Owner		6-1-55								flowing
CDE-41		4-12-17	Verde Ranch	2782.1	552	C 10	N	902		
										flowing
26G2	GS	2-27-57	Kalin Co.			10	T 1½		I	
	GS	6-6-56							TcN 2.0	
CDE-42		4-12-17	Verde Ranch	2782.1		C 10	N		TcN 2.0	+1.55
										flowing
26G3	GS	2-27-57	Kalin Co.	2785		8	T 15	10	I	
	GS	6-6-56							Tc 2.0	
										flowing

- a. Pumping.
 k. Pumping, reportedly flows when not pumped.

SGS N. 11 number	Source of data and other numbers:	Date of observa- tion:	Owner or user	Year com- pleted:	Altitude: (feet)	Depth (feet)	Type of well:	Water level
5-26J1	GS	2-27-57	Kalin Co., 7				wall	
	GS	6-56						
	U-67	5-15-31	Verde Ranch					

T. 5 N., R. 4 W.--Continued.

26J2	GS CDE-43	6- 6-56 5-15-31 4-12-17	Kalin Co. Verde Ranch Verde Ranch	1939	2810	100	T	10	2792.1	17.8	10	N	Un	TcS	4.0	6.59
26Q2	GS U-65	2-27-57 1-28-31	L. A. Phillips	1939	2806	40	Cd	10		2803.3	106	C	10	Tc	3.0	2.7
26R1	GS CDE-45	6- 6-56 11-12-31 4-12-17	Kalin Co., 6 Verde Ranch	1938	2806	40	T	10		2800	10	N	Dm	Bpb	1.0	21.36
26-1	CDE-44	4-12-17	Verde Ranch	1939	2806	40	Cd	6		2798.4	10	N	Dm	Bpb	-3.0	21.33
27B1	GS	2-26-57	M. Waller	1939	2820	45	D	10		2830	10	N	Dm	Tdp	0	17.3
27B2	GS	2-26-57	M. Waller	1939	2820	45	D	10		2830	10	N	Un	Tdp	2.5	32.28
27B3	GS	2-26-57	M. Tilton	1955	2820	48	S	10		2830	10	J	Dm	Tcc	.5	33.80
27B4	GS	2-26-57	E. Shivers	1955	2830	48	L	10		2830	10	3/4	Dm	Na		

Table 1
5N/4W 95

USGS well number	Source of data and obj. or numbers	Date of observation	Owner or user	com- pleted:	Year Altitude: (feet)	Depth: (feet)	Type and yield: ever: (in.)	well of well: well: (in.)	Pump data and power: (GPM)	Use point: (feet)	Measuring below 1st: (feet): (feet)	Water level		
5/4-27B5	GS	2-26-57	E. Kerner	1944	2830	D	14	L	W	Dm	Tcl	1.0	40.46	
27B6	GS	2-26-57	W. Hanson	1950	2845	100	J	1	Dm	Na				
27B7	GS	2-26-57	McGovern	1951	2860	101	6	T	1 ₂	Dm	Na			
27C1	GS	2-26-57	K. Martin	2830	80	C	12	T	1	Dm	Na			
27C2	GS	2-26-57	C. Martin	2830	30	T	1 ₂			Dm	Tbc	.3	26.95	
27C3	GS	2-26-57	C. Hunt	2860	165	9	T	G		Dm	TcS	.5	71.35	
27C4	GS U-64	2-26-57 2-20-32	B. Wayne E. Wagner	2855		10	J	$\frac{1}{2}$		Dm	TcE	0	71.12	
27C5	GS	2-26-57	B. Cood	2850		8	T	1 ₂		Dm	TcS	1.0	62.46	
27C6	GS	2-26-57	D. Cascarella	1953	2880	96	CG	9	Ts	1	40	TcW	.5	66.53 L
27C7	GS	2-27-57	J. Fenneberg	1955	2870	135	CG	8	Ts	1	Dm	TcW	0	79.93 L
27C8	GS	2-27-57	F. M. Thompson	1951	2865	90	C	8	L	2	Dm	TcW	.5	74.90
27C9	GS	2-27-57	J. Kolishnik	2870		C	8	L	$\frac{1}{2}$	Dm	TcN	.5	81.10	
27C10	GS	2-27-57	C. Graham	2845	104	10	T	5	Dm, I	Na	40			

T. 5 N., R. 1 W.--Continued.

USGS well number	Source of data end other numbers	Date of observation	Owner or user	Year com- pleted	Altitude: Depth (feet) : (feet)	Type and diam- eter:	Yield: well: (gpm): (in.) power: (feet): (feet)	Use of well	Measuring point: to water: below l.s.	Dept.: Tcc	Other
5/4-27D1	GS	2-26-57	M. Dillard	2900				E	Dm	Na	
27D2	GS	2-26-57	W. Massey	2870	82	Cd	8 L	W	Dm	Tcc	1.0
27D3	GS	2-26-57	R. Chipchick	1942	2855	90	C 8 L	2	Dm	Tcc	1.0
27D4	GS	2-27-57	R. D. Jenson	2855	175		8 J	1	Dm	TcE	3.0
27E1	GS	2-25-57	J. E. Hester	2890		G	8 J	1	Dm	TcN	.3
27E2	GS	2-25-57	G. Wondra	1955	2890	C		E	Un	Na	
27E3	GS	2-26-57	Palmer		2895	C	8 Ts	1/4	Dm	TcN	1.0
27E4	GS	2-26-57	A. Baker	1953	2890	C	10 T	2	Dm	TcS	.4
27F1	GS	2-26-57	E. Shivers	1954	2890	150	6 Ts	5	Dm, I	Tcc	2.5
27F2	GS	2-26-57	W. Engel	1947	2875	132	C 6 J	1	Dm	BpbW	.3
27G1	GS	2-26-57	H. Peters	1952	2855	96	R 6 J	1	Dm	Na	
27G2	GS	2-26-57	Alpin		2855	90.8	8 L	G	Dm	TcE	.57
											56.92

T. 5 N., R. 4 W.--Continued

5/4-27D1	GS	2-26-57	M. Dillard	2900				E	Dm	Na	
27D2	GS	2-26-57	W. Massey	2870	82	Cd	8 L	W	Dm	Tcc	1.0
27D3	GS	2-26-57	R. Chipchick	1942	2855	90	C 8 L	2	Dm	Tcc	1.0
27D4	GS	2-27-57	R. D. Jenson	2855	175		8 J	1	Dm	TcE	3.0
27E1	GS	2-25-57	J. E. Hester	2890		G	8 J	1	Dm	TcN	.3
27E2	GS	2-25-57	G. Wondra	1955	2890	C		E	Un	Na	
27E3	GS	2-26-57	Palmer		2895	C	8 Ts	1/4	Dm	TcN	1.0
27E4	GS	2-26-57	A. Baker	1953	2890	C	10 T	2	Dm	TcS	.4
27F1	GS	2-26-57	E. Shivers	1954	2890	150	6 Ts	5	Dm, I	Tcc	2.5
27F2	GS	2-26-57	W. Engel	1947	2875	132	C 6 J	1	Dm	BpbW	.3
27G1	GS	2-26-57	H. Peters	1952	2855	96	R 6 J	1	Dm	Na	
27G2	GS	2-26-57	Alpin		2855	90.8	8 L	G	Dm	TcE	.57
											56.92

a. Pumping.

Source of data	Date	Year completed	Type well	Type pump	Water level
USGS well number	of end	Owner or user	and	and	Measuring point
well number	end	observation	type	diameter	Depth to water
	Other numbers	numbers	and	of well	: data below 1 s (feet) (feet)

T. 5 N., 2 R. 1/4 W. --Continued.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Type well	Pump date	Water level
5/4-33E1	GS	3- 1-57	Harold Welch	1951	3025	300
33H1	GS	3- 1-57		1925	3005	8
35A1	GS U-68 CDE-47	4- 5-56 5-15-31 4-12-17	Kalin Co. Verde Ranch		10	T 3 918
35A2	GS CDE-48	6- 6-56 4-12-17	Kalin Co., 4 Verde Ranch	2799.1 2800.2	C 10 N	Dm Tap 2.0
35A3	GS CDE-46	6- 6-56 4-12-17	Kalin Co., 5 Verde Ranch		12 T 15	7.32 L flowing Wp
35H1	GS CDE-49	6- 6-56 4-12-17	Fish Hatchery Verde Ranch	1912 2811.0	C 10 N	I TcE O a33.86 C flowing
35H2	GS U-71 CDE-50	6- 6-56 4- 3-30 4-12-17	Fish Hatchery Verde Ranch	1912 2811.0	C 12 C G 3150	In Na 4.0
35H3	GS	3-14-57	Fish Hatchery, 5	1956 2815	405 RG 20 T 75	2800 In Bnc 1.0 a56.09

T. 5 N., R. 4 W.--Continued.

a. Pumping.

USGS well number	Source of data and other numbers	Date	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and size (in.)	Pump well and (gpm)	Use of well (in.)	Measuring: Type and (gpm)	Depth point well (feet)	Water level (feet)
5/4-35J1	GS	6- 6-56	Fish Hatchery	1952	2815	405	RG 16	T 75	3000	In	Na	C,L
35J2	GS	6- 6-56	Fish Hatchery	1952	2815	412	16	T 75	In	Na		L
35L1	GS	2-28-57	W. H. Sweet	1954	2900	185	RG 8	Ts 1	Dm	Tcc 0	90.76	
35L2	GS	2-28-57	L. O'Neill	1950	2885	152	C 8	T 2	Dm	Na		L
35M1	GS	2-28-57	J. B. Andrews	1950	2910	200	E		Dm	Na		L
35M1	GS U-74	2-28-57 3-24-33	Paul Schroeder	2940		8	J 2		Dm	Tcw 0	125.50	
35R1	GS	6- 6-56	Kalin Co.	2885	557	14	T 7½	I	Tcw 1.5	a89.94	L	112.3 Wp
35-1	CDE-51	4-12-17	Verde Ranch	2811.0	270	C 12	C G	3150			4.0	
35-2	U-70	1-28-31							Tdp 2.0	+7.8		
36E1	GS Owner	6- 6-56 6- ?-56	Kalin Co.	2810	14	T 20	I	1190	Tcs 0	14.75 a41.0		
36G1	GS	5-23-56	Kalin Co.	1952	2810	286	T 40	1890 I	Tap 1.0	13.50 L		

T. 5 N., R. 4 W.--Continued.

USGS well number	Source of data and number of numbers	Date of observation	Owner or user	Year completed	Altitude (feet)	Depth (feet)	Type and diam- eter	Yield (gpm)	well power (in.)	Water level at 20.5 feet
5/14-35H1	GS	2- 1-57	R. E. Dexter		100		T 15	620	Dm, I	Bpb 1.0 Bpb 1.0
	GS	5-13-50	Orr and Puller	1909	2825.2	110	C 12 C G	675		14.78 7.0
36NL	GS	4- 5-56	Kalin Co., 1		2827		T 20	1240	I	Bnc 1.0 Ter .2
	U-72	5-17-34	Verde Ranch				C 12 C G			19.75 W 6.7 4.0
CDE-52		4-12-17			306					
36N2	GS	5-23-56	Kalin Co.	1955	2825	265	RG 18 T	30 2000	I	Bnc 0
	GS	5-23-56	Kalin Co.		2825	19.5	C G			20.61 L
36N3	GS	6- 6-56	Kalin Co., 2				T 25	1162	I	Tcs 0
	CDE-55	3- 5-17	Verde Ranch	2824.0	270	C 12 C G				10.15
36P1	GS	5-23-56	Kalin Co., 10				T 20	1016	I	Bnc 0
	CDE-53	3- 5-17	Verde Ranch	2824.0	270	C 12 C G				23.55 12.8
36P2	GS	5-23-56	Kalin Co.		2820		T 15	958	I	Bnc 0
				2820			N			427.70
36P3	GS	5-23-56	Kalin Co.				N			
	U-41	5-13-32					S			
36Q1	GS	5-23-56	Kalin Co.		2825		T 3		Dm	Na
36-1	CDE-54	3- 5-17	Verde Ranch	2824.0	270	C 12 C G	3600			12.8

T. 5 N., R. 4 W.--Continued.

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and diam- eter	Pump data and power (in.)	Water level at point (feet) (in.)	Measuring: point below ls. (feet)	Other use	
2H1	GS CDE-190	4- 3-57 3- 8-17	C. H. Smith	1913	2902.2	76.9	D D	N N	Ds	dry 120.9		
2-1	CDE-189	1917	C. H. Smith	1909	2949.6	156	D D	L L	W		153.0	
3M1	GS	1-25-57	J. H. Dosting	2975	305	12	L G	Dm, S		(a)		
4C1	GS F-6/5-33L1	4- 9-57 5- 4-48	McCurdy	2940	150.3	6	N N	Un	TcS TcS	7.5 7.5	126.40 120.5	
5A1	GS F-4D1	1-25-57 12-17-56	B. Scottgins	2950	C	8	L G	Dm	Tap Tap	.8 .8	128.20 128.30	
5B1	GS	1-25-57	Chritophersen	2950	195.9	CG	8	N N	Dm	TcE	.5	123.92
5C1	GS	1-25-57	R. D. Clark	1956	2945	251	C 10	L G	Dm	Na	136	L
5C2	GS	1-25-57	O. D. Carr	2955	250	CG	8	L G	Dm	TcN	.3	126.22
5L1	GS	1-25-57		2975	C	8	L W		Dm		(a)	
6P1	GS CDE-193	1-23-57 3- 8-17	J. P. Caldwell	3010	146.2	C 650	12	N L	Ds	dry 174.5		10 SN/SN

T. 5 N., R. 5 W.

5/5-1-1	CDE-324	1917					D	N N			119.0	
2H1	GS	4- 3-57										
2-1	CDE-189	1917	C. H. Smith	1909	2949.6	156	D D	L L	W			
3M1	GS	1-25-57	J. H. Dosting	2975	305	12	L G	Dm, S				
4C1	GS F-6/5-33L1	4- 9-57 5- 4-48	McCurdy	2940	150.3	6	N N	Un	TcS TcS	7.5 7.5	126.40 120.5	
5A1	GS F-4D1	1-25-57 12-17-56	B. Scottgins	2950	C	8	L G	Dm	Tap Tap	.8 .8	128.20 128.30	
5B1	GS	1-25-57	Chritophersen	2950	195.9	CG	8	N N	Dm	TcE	.5	123.92
5C1	GS	1-25-57	R. D. Clark	1956	2945	251	C 10	L G	Dm	Na	136	L
5C2	GS	1-25-57	O. D. Carr	2955	250	CG	8	L G	Dm	TcN	.3	126.22
5L1	GS	1-25-57		2975	C	8	L W		Dm		(a)	
6P1	GS CDE-193	1-23-57 3- 8-17	J. P. Caldwell	3010	146.2	C 650	12	N L	Ds	dry 174.5		10 SN/SN

a. Pumping.

Source of data and other numbers	Date of observation	Owner or user	Year completed	Altitude (feet)	Depth (feet)	Type of well	Pump data	Water level
USGS well number								
5/5-3:1	GS	1-25-57	L. E. Carder	1955	3000	300	C 8 L G	Dn Tap 0.2 179.93 C,L
8L1	GS	2-19-57	W. W. Herron	1957	3035	293	RG 8 N N	
6R1	GS CDE-191	1-23-57 3-8-17	Lee Purcell E. L. DeBolt	1912	3050.0	300 285	14 L W C 12 L G	Dm,S Bnc 1.0 235.41 238.6
9D1	GS	1-25-57	J. A. Young	1953	3005	300	C L E	Dm Na
12R1	GS CDE-186	4-2-57 3-8-17	P. S. Carl	1909	2938.3	10	N N Ds	dry 143.1
12-1	CDE-187	1917	A. M. Corder			80	C 8 N N	70.0
13D1	GS CDE-188	4-2-57 1917	AT and SF RR			2967.1	107.0 C 8 N N	Ds dry 70.0
15N1	GS	1-25-57	W. MacGregor	1951	3090		10 L W	Dm L
15-1	CDE-180	4-6-17	C. R. Smyth	1902	3090.3	323	C 8 L W	292.5
18-1	CDE-179	4-6-17	W. W. Yeager	1915	3142.8	305	D N N	298.6
19-1	CDE-321	1917	P. Weile			365	C N N	313.0

T. 5 N., R. 5 W.--Continued.

5/5-3:1	GS	1-25-57	L. E. Carder	1955	3000	300	C 8 L G	Dn Tap 0.2 179.93 C,L
8L1	GS	2-19-57	W. W. Herron	1957	3035	293	RG 8 N N	
6R1	GS CDE-191	1-23-57 3-8-17	Lee Purcell E. L. DeBolt	1912	3050.0	300 285	14 L W C 12 L G	Dm,S Bnc 1.0 235.41 238.6
9D1	GS	1-25-57	J. A. Young	1953	3005	300	C L E	Dm Na
12R1	GS CDE-186	4-2-57 3-8-17	P. S. Carl	1909	2938.3	10	N N Ds	dry 143.1
12-1	CDE-187	1917	A. M. Corder			80	C 8 N N	70.0
13D1	GS CDE-188	4-2-57 1917	AT and SF RR			2967.1	107.0 C 8 N N	Ds dry 70.0
15N1	GS	1-25-57	W. MacGregor	1951	3090		10 L W	Dm L
15-1	CDE-180	4-6-17	C. R. Smyth	1902	3090.3	323	C 8 L W	292.5
18-1	CDE-179	4-6-17	W. W. Yeager	1915	3142.8	305	D N N	298.6
19-1	CDE-321	1917	P. Weile			365	C N N	313.0

h. Drilling.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Type of well	Altitude (feet)	Depth (feet)	and Type of well	Pump data	Use point of well	Measuring: Depth to water	Other data	
5/5-20-1	CDE-181	3- 8-17	T. S. V. Benson	3165.3	365	C	7	N	N	323.0		
21J1	GS	1-23-57	A. Minghelli	1952	3140	500	R	10	L	3		
21L1	GS	1-23-57	I. S. Clark	3145	325	C	6	L	$\frac{1}{2}$	Dm		
22E1	GS	2-19-57	J. Harris			C	8	L	W	Dm	TccW	
F-22N1	11- 5-53										.4	
CDE-185	1918?	H. T. Woods	1908	3121.0	340	C	8	L	G	108	313.25	
22K1	GS	1-25-57	California Electric Power Co.	1938	3105	437	C	8	T	5	298.55	
22M1	GS	1-25-57	C. W. Buist			330.9	C	8	N	Un	324	
CDE-184	1917	W. G. Doble	1903	3125.9	325	C	5	L	G		307.0	
22M2	GS	1-28-57	C. W. Buist	3135	325	R	10	L	$\frac{1}{2}$	Dm	300.0	
22-1	CDE-183	1917	W. G. Doble	1912	3125.9	340	C	10	L	N		
24R1	GS	3-19-57	Victorville County Water District	1955	3055	569	RG	14	T	75	Tsp	305.0
24-1	CDE-323	1917				C	N	N				e244.96
27Q1	GS	2-19-57	S. I. Pickett			144.6	N	N	Ds		240.0	
CDE-322	1917			578	C	N	N				dry	570.0
											Temp	571.0

Source :		Date :	Owner or user :	Year completed :	Type of pump:	Pump data:	Water level:
USGS well number	2C1	GS	1-17-57		well		
	2C2	GS	1-17-57		Depth (feet)	of well	Measuring point below l.s. (feet)
2-1	CDE-318	1917	G. Penaul		Yield of well	Depth to water (feet)	Other data (feet)
éN1	GS CDE-214	12-6-56 2-19-18	W. Sly	1911	3149.3	224.7 C 12 N	TccE 1.0 dry 251.0
12E1	GS	1-17-57		3055		D 8 L	Ds
12F1	GS	1-17-57	Friesen	3055		D 8 L	Ds
12F2	GS CDE-192	1-17-57 4-6-17	L. W. DeBolt	1913	3065.0	118.4 D 48 N	Tcc 1.0 dry 211.0
12M1	GS CDE-319	11-6-57 1-17-57		3100	R 816 N	N	Tcc 1.4 Tcc 1.4 179.92 150.0
12-1	CDE-320	1917	D. S. Bell		D	N	300.0
13H1	GS	1-18-57		423	C N	N	Hpb .6 214.72
				3120	R 12 T	E	

d. Tape smears.

e. This well probably has been redrilled. Correlation with CDE number uncertain.

T. 5 N.; R. 6 W.--Continued.

5/6-22G1	GS	1-16-57	C. Westhaver	1935?	3255	400	R	8	L	W	Dm, S	Na	350	C
22J1	GS	1-17-57	T. Lee	1914	3254.5	400	C	8	T	G	Dm, S	Na	365	C
	CDE-175	1917	F. C. Lang		536	C	12	L	G	297			330.0	
22R1	GS	1-17-57		1923	3285		R	8	N	N	Ds		(j)	L
22-1	CDE-176	4- 6-17	Julia Lang		3250.1	475	C	12	N	N			328.5	
29Q1	GS	1-10-57			3445	542.9		12	N	N	Ds			dry
35G1	GS	2-19-57	L. Riggins		3405.9	550	C	12	L	W	S			W
	CDE-173	4- 6-17	F. W. Lang		598	C	12	N	N				505.3	

E. 3 N. 2 R. 1 W.

	GS	12-556	G. S. Pownald	1913	3157.8	380	C	6	L	W	Ds	dry	235.0
5/7-2Q1	CDE-212	1917	G. S. Pownald	1913	3157.8	380	C	6	L	W			
4-1	CDE-211	4-7-17	T. O. Ford		3157.4	300	C	12	L	G			238.3
5P1	GS	12-556	A. M. Steele	3155.1	390	C	6	N	N	Un	Na		232.0

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Type of well	Pump data	Water level

T. 5 N., R. 7 W.--Continued.

1/7- 6E1	GS CDE-296	11-29-56 2-17-18	L. B. Coleman	3109.0	C 10 N	T 10 W	Dn,S	TheN 1.2	204.27
9H1	GS GS CDE-210	11- 6-57 12- 5-56 1917	Johnson O. W. Jessup		8 C 350	L 8 L	S	TcN TcN .4 .4	199.0 283.29 282.89 280.0 C
12F1	GS CDE-213	12- 6-56 1917	DeMerville-Rowley	3230 415	301.6 C 12	N N	Ds		dry 315.0
24D1	GS	12- 6-56	G. Moritz	3337	h22 D	N	N		
<u>T. 6 N., R. 2 W.</u>									
1/2- 5C1	GS	1-11-57		3540	280.0 C	N	N	Ds	dry
28-1	CDE-332	1917	A. J. Allen		D	N	N		123.0
33F1	GS	4-26-57		3200		12	N	Un	
33-1	CDE-333	1917	Jackson		D	N	N	TcS 1.0	124.19
34M1	GS F-3X1	1-17-57 11-16-54	Oldenberg	3240	344.0	12	N	Un Tc 0	160.0 177.19 212.65
h. Drilling.									

Table 1
6/2W
5N/7W

T. 6 N., R. 3 W.

Source	of data	Date	:	:	:	Type	Pump data	:	Water level
Well number	and other numbers	of observation	Owner or user	Year completed	Altitude : Depth : (feet)	well and type	Use	Measuring point	Dept. Other
1/3- 8G1	GS	2-21-57							
8G2	GS	2-21-57		3090	57.5 D	N N	Dm	Tbc 2.0	51.17
8H1	GS	2-21-57	C. A. Foster	3080		E	Dm	Na	
8H2	GS	2-21-57	J. J. Sapp	3085	87	J $\frac{1}{2}$	Dm	Bpb .5	39.8
8H3	GS	2-21-57	Joshua Gatson	3090	105	J 3/4	Dm	Na	
8J1	GS	2-21-57		3090	70	T 1	Dm	Bpb .5	41.09
8J1	GS	2-21-57	Florence Harvey	3070	58.1 D	N N	Un	Tbc 1.0	40.32
8J1	GS	2-20-57	Sarah Guess	3080	110	J? 1	Dm	TcS 1.0	63.50
9R2	GS	2-21-57	H. E. Woods	3115	70	6 L W	Dm	TcS 1.4	41.65 W
9T1	GS	2-21-57	S. C. Guess	1948	3090	C 8 L W	Un	TcN 3.85	38.91 W
9E2	GS F-9P1	2-21-57	S. C. Guess	1955	3095	60 CG 8 J 1 5	Dm	TcW 1.0	38.07 L
9E3	GS DGT-339	2-26-57 2-19-18		1945	3095	49.6 C 8 L W	Un	TcW 1.3	40.86 W
				3095	46 D N N	Un	Ls 0	41.82 41.0	

Table 1
6N/3W

109

Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type well	Pump data	Use	Water level
F-9E1 BR-28 DGT-338	2-27-57 2-19-18	C. D. Bazile J. P. Whitby Sidewinder well	1897	3085	31.0	D 48	J $\frac{1}{2}$	Dm	Tcr 0.5 30.36
9F1 GS	2-27-57	R. C. Jones	1952	3120	33	D 48	L N	Tcr .67	W 20.7 C
9F2 GS	2-27-57	R. C. Jones	1948	3120	134	RG 6	T 1	Dm	Na
9F3 GS	2-27-57	T. H. Waite		94	RG 6	J E		Dm	BpbN .5 67.88
9G1 GS	2-27-57			3115	10	L N		Dm	TcE .5 58.82
9M1 GS	2-27-57	D. W. Phelps	1944	3080	3155	105.7 C 14	L H	Un	Tcr .5 dry
9M2 GS	2-27-57	Lesli Gray		72	8	J E		Dm	26
9M3 GS	2-27-57	Emma Lilly	1940	3070	50	CG 8 T	$\frac{1}{2}$	Un	TcW .8 30.27
9NL GS	2-27-57	Southwest Portland Cement Co.	3065	80.5	10	N N		Dm	Tcl 2.5 29.56
9P1 GS	2-27-57	Guy		3085	CG 6 L?	E		Un	Tcc 1.0 52.49
11D1 GS	2-27-57	Rufus Weems		3280	L H			Un	Na

T. 6 N., R. 3 W.--Continued.

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Pump data	Water level
13-14E1	GS	2-28-57							
14H1	GS	2-28-57							
14N1	GS	2-28-57							
15B1	GS	2-28-57	C. C. Cook	1930	3165	80.1	D		
15J1	GS	2-28-57	C. J. Evans				N		
16C1	GS	3- 1-57	John Dickson	1951	3080	63.0	C	L	
16D1	GS	2-28-57	Community Center				L	W	
16D2	GS	2-28-57					N		
17A1	GS	3- 1-57	Bowen				24	N	
17A2	GS	3- 1-57					J	1	
17B1	GS DGT-340	3- 1-57 12-30-17	Melba Armstrong G. Marietta				D	N	
17B2	GS	3- 1-57	W. W. Johnson	1950	3040	70	C	8	
17B3	GS	3- 1-57	Mildred Cato				L	W	

T. 6 N., R. 3 W.--Continued.

3185	60.7	D	N	N	Un	Tcr	0.5	56.5
3230	92.5	D	N	N	Un	Tbc	1.0	86.73
3170	68.0	D	B	H	Un	Tcr	2.0	64.09
3165	80.1	D	N	N	Un	Tcr	.5	76.88
3080	63.0		C	L	Un	TcW	1.0	87.13
3055			8	N	Un	Tc	.6	39.03
3065	50.2	C	24	N	Un	Na		
3045	130.8	C	10	J	1	Dm		
3045		D	N	N	Un	Tcr	0	58.66
3050	87.1	D	L	W	35	Dm	Tbc	1.5
87		D						73
3040	70	C	8	L	W	Dm	Tcc	1.0
3040			L	W	Dm			63.42

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and diam- eter (EPM) (in.)	Pump well yield power (EPM) (feet)	Use of well (in.)	Measuring point to water (feet)	Depth below level (feet)	Water level
------------------------	--	--------------------------------	---------------	------------------------	--------------------	-----------------	--	---	----------------------------	--	-----------------------------------	-------------

T. 6 N., R. 3 W.--Continued.

6/3-17B4	GS	3- 1-57	Waller	1946	3040	80	C 12 L	W	Dm	Tcc	1.3	71.65
17B5	GS	5-21-57	W. Steward	1948	3050	140	C 12 J	1	S	TcW	1.0	66.56
17B6	GS	5-21-57	W. Steward		3040	74.0	D N	N	Un	Tcr	0	55.81
17C1	GS	5- 7-57	W. Steward	1951	3040		14 L	W	1240	Dm	Tcc	1.3
17D1	GS	5- 7-57	Veola Jenkins		3030	96	6 J	1	Dm	Na		54.84 L
17E1	GS	5- 8-57	Lee Johnson	1951	3020	160	C 8 L	W	Dm	Tbc	.5	a84.90
17F1	GS	3- 1-57	David Medlock	1950	3030	198	C 8 L	G	Dm, S	Na		
17F2	GS	3- 1-57	Jones		3035	90	L	W	Dm	Na		
17F3	GS	3- 1-57	Moore	1947	3035	78	10 L	E	Un	Na		
17H1	GS	3- 1-57	M. Horn		3035		L $\frac{1}{4}$		Dm	Tcr	.2	73.11
17H2	GS	3- 1-57	M. Horn		3035	133.4	C 10 N	N				
17K1	GS	3- 1-57	Pinchem	1954	3015	96.5	R 7 N	N	Un	TcE	1.5	53.43
21P1	GS	5- 8-57		* 3000	158.2	8 N	N	Un	TcW	2.2	153.50	

113

Source	Date	Type	Pump data	Water level
USGS well number	of data and other numbers	Year com- pleted	Altitude (feet)	Depth and Type of well
Owner or user	observa- tion	com- pleted	diam- (feet)	Yield and (gpm)
			eter	power (in.)
				(feet)

T. 6 N., R. 3 W.--Continued.

6/3-28R1	GS	5-15-57	Irene McCarthy																
	BR-30	11-7-50	McCarthy																
	CDE-146	1917	Byron Buneman	1915	2968.0	172	12	T	20		Dm, I	Hpb	0.8	142.04	W				
											Dm	Hpb	.8	127.25					
32R1	GS	5-16-57	Louis Bellson	1928	2930	196.7	R	10	T	5	Dm, I	Hpb	1.0	115.65	C				
33J1	GS	5-16-57	J. P. Claybaugh								Dm	TcS	1.0	125.51					
33M1	GS	5-16-57	W. J. Johnston	1954	2930	135	CG	8	Ts	1	30	TcN	1.0	96.89	L				
33N2	GS	5-16-57	R. E. Clark	1954	2930	140.	C	9	J	1	Dm	Na			94	L			
33N3	GS	5-16-57	Fred Snyder								Dm	Na							
33P1	GS	5-16-57	George McCarthy								Ds				(j)				
33Q1	GS	5-16-57	Miller																
33Q2	GS	5-16-57	A. L. Domike	1952	2920	120	C	8	Ts	1	Dm	TcE	1.0	106.60					
33R1	GS	5-16-57	H. S. Kennedy								Dm	TcW	.7	95.53					
33R2	GS	5-16-57	Emily Flohr	2930							Dm	TcW	.5	98.47					

Source USGS of data and other matter numbers:	Date of observa- tion:	Owner or user	Year com- pleted:	Altitude (feet)	Depth (feet)	Type well:	Pump data	Use	Measuring: point to water (feet)	Depth below 1sd: (feet)	Other
:	:	:	:	:	:	:	:	:	:	:	:

T. 6 N., R. 3 W.--Continued.

34A1 GS	5-17-57	Hampden, Wentworth, et al.	3020	G	12	T	75	I	Na	C	
34E1 GS	5-17-57	H. W. Stewart	1955	2950	G	T	50	I	Hpb	1.0	(a)
34G1 GS	5-17-57	C. E. Moore	1920	2950	190	Ca	8	Ts 3/4	Dm	TcS	.5
34J1 GS	5-17-57	Pacific Water Co.	1952	2950	G	12	T	15	Ps	Tap	.5
34L1 GS	5-17-57	E. H. Corwin	1910	2950	95.5	D	N	Ds			
CDE-145	3-4-17			110	D	L	W				dry 101.2
34L2 GS	5-17-57	R. D. Bishop	1941	2940	140	C	8	Ts 1/3	Dm	TcN	1.0
34M1 GS	5-17-57	C. R. Read	1955	2940			8	Ts 1½	Dm	Na	L
34M2 GS	5-17-57	C. R. Read	1948	2940			6	N	Un	Na	L
34N1 GS	5-17-57			2920		T	1		Dm	Na	
34N2 GS	5-17-57			2920		6	L		Dm	Na	
34N3 GS	5-17-57	L. R. Conard	2920		T	1½			Dm	Na	

a. Pumping.

USGS well number	Source of data and other numbers	Date of observa- tion	Owner or user	com- pleted	Year Altitude (feet)	Depth (feet)	Type of well	Pump data	Use of well	Measuring point (feet)	Depth to water (feet)	Water level (feet)	
6/3-34RI	GS	5-17-57	Cedarquest		2950		8	L	N	Dm	Tcc	1.0	141.78 L
35C1	GS	5-21-57	P. Linden		3090		8	E		Dm	Na		L
35L1	GS	5-21-57	C. E. Waas		3010		6	N	N	Un	Tcc	.5	180
35M1	GS	5-17-57	D. E. Waas	1937	3000	150	L	W	Un	Na			
35N2	GS	5-17-57	E. R. Waas	1946	2980		8	N	N	Un	TcN	1.0	148.30
35P1	GS	5-17-57	Paul Waas	1946	3000		6	L	3/4	Dm			
35P2	GS	5-21-57	Jean Smith		3000		6	N	N	Un			

T. 6 N., R. 3 W.--Continued.

6/6-6Q1	GS	11-14-56	L. Bryant		2840	63	C	8	L	W	Dm, S	57	
6Q2	GS	11-14-56	R. Bryant	1955	2850	231.5	R	10	N	N	54	Un	
6Q3	GS	11-13-56	Bryant		2840	80	C	L	W	Dm	Tbc	1.3	56.52

T-21e
6N/C
6N/C

Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Pump data	Use of well	Measuring point of well	Depth to water	Water level
USGS well number											

T. 6 N., R. 6 W.--Continued.

12E1	GS CDE-255	11-27-56 2-14-18	Southern Pacific Co. Southern Pacific Co.	1890	2938.2	24	D	N	N	Ds	dry
12F1	GS	1-16-57		2780		C	L	W		Dm	23.0
12G1	GS	1-16-57		2770		C	8	L	W	Dm	TcE
12H1	GS	1-16-57		2775		C	L	W		Dm	0.9
13B1	GS	1-16-57		2775		C	6	L	W	Dm	102
13E1	GS	1-16-57	T. Songer	2820		10	L	G		Dm	.9
14N1	GS CDE-315	1-16-57 1917	R. R. Jamison	2835	51.6	D	60	L	W	Un	Tcr
14P1	GS CDE-292	1-16-57 2-20-18	M. Rothenburg B. S. Hook	2833.0	D	48	J	1		Dm, S	56.85
14P2	GS	1-16-57	M. Rothenburg	2830	62.6	D	60	L	W	Dm, S	42.5
14P3	GS	1-16-57		2835	238.2	C	14	N		Un	42.96
14R1	GS CDE-316	2-19-57 1917		2820	48.6	D	36	N		Un	46.12
					54	D	L	W		TcrW	41.28
										W	40.0

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Pump data	Water level

T. 6 N., R. 6 W.--Continued.

6/6-18M	GS BR-7 CDE-314	2-27-56	C. Strickanen Johnson R. R. Jamison	2895	120	8 J $\frac{1}{2}$	Dm	TcS	0.2 49.60
18P1	GS	11-27-56	G. R. Russell	2895	58	D N N	Dm	Na	56.0
18P2	GS	11-27-56		2895		6 T 1	Dm	Na	
18Q1	GS CDE-229	11-27-56 1917	W. B. Phillips	1911	2895	G 8 T E	Dm	Hpb	.8 45.30
18Q2	GS F-18P1	11-26-56		2895	72.6	D 18 N N	Un	Tcr	1.0 48.42
18Q3	GS	11-26-56		2890		L W	Dm, S	Na	45.0
18Q4	GS	11-27-56		2890		8 L 3/4	Dm, S	Tcc	1.0 48.43
18-1	CDE-230	4- 7-17	F. P. Williams			C 12 N N			48.9
18-2	CDE-231	1917	F. P. Williams	205	C 12 L G				32.0
19C1	GS	11- 8-56	W. D. Belknap	2895		8 T $\frac{1}{2}$	Dm	Hpb	1.3 51.92
19C2	GS	11- 7-56		2900	CG 6 J 1	Dm	Tcc	1.3	53.05

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and yield of well	Pump data	Use of well	Measuring point below 1st (feet)	Water level	Other	
21A1	GS	11-13-56		2860		8	L	W	Dm, S	(a)	W		
21J1	GS	11-13-56		2890		C	8	L	W	Dm	(a)		
21K1	GS	11-13-56		2885		C	6?	L	W	Dm	TcE	0.6	
21K2	GS	11-13-56		2885	(h)	C	8	N	N			130.0	
22G1	GS	1-16-57	W. F. Karst	1956	2860	85	C	8	L	G	Dm	BnCS	
22H1	GS	1-16-57		2860	128.9	6	L	W	Un	TcN	.2	66.70	
22K1	GS	11- 8-56		2885	CG	6	T	G	Dm	BnC	.5	63.05	
24B1	GS	1-16-57		2820	52.3	D	36	N	N	Un		82.90	
24D1	GS F-24AU	4- 3-56	Powell	1932	2830	85	10	L	W	Dm	Tc	1.0	
24J1	GS	1-16-57	J. Schmidt	1952	2835	91.5	C	10	Ts	E	Dm	TcE	.5
												70.23	
												W	
												69.55	

T. 6 N., R. 6 W.--Continued.

A. Pumping.
B. Drilling.

T. 6 N., R. 6 W.--Continued.

6/6-25A1	GS	1-16-57	Jack Payne	1956	2855	134	R	8	J	1½	11	Dm		75	
26Q1	GS	1-16-57		2930	149.6	8	N	W			Dm	Tap	1.2	113.06	
27-1	CDE-313	1917				C	12	N	N			TcS	.6	128.0	
28F1	GS	11- 7-56	J. H. Webster		115	C	12	L	W		Dm	TcS	.6	98.36	
	F-28E1	11-14-47				C	12	L	G					W	
	CDE-227	1917	J. W. Walker	2948.3	136	C	12	L	G					98.4	
														102.0	
28H1	GS	3- 8-58													
	CDE-228	2-20-18	L. M. Cotton	1915	2948.9	150	C	12	L	G		TcW	.3	102.87	
														W	
30K1	GS	11- 7-56				3005	133.8	C	12	N	N	Ds			
	CDE-225	3- 7-17	C. H. Sampson	1911		136	C	12	N	N				dry	
														133.2	
30K2	GS	11- 7-56				3005	17.8	C	12	N	N	Ds			
	CDE-224	3- 7-17	C. H. Sampson	1915		250	C	12	N	N				dry	
														133.2	
31Q1	GS	11- 7-56				3055	220	C	8	L	W	Dm	TcE	1.4	180.82
												S	BnC	.9	156.82
32K1	GS	11- 7-56	F. Reinke				226	C	12	L	W				
	F-32P1														W
	CDE-276	2-20-18	F. Reinke	1910	3047.8	380	C	12	N	N					131.0

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year completed	Altitude (feet)	Depth (feet)	Type of diam- eter	Yield and power (gpm) (in.)	Pump data	Use point (feet)	Measuring: Depth to water (feet)	Water level (feet)
<u>T. 6 N., R. 7 W.</u>												
2-1	GS CDE-298	8-16-56 2-21-18			2850	107		18	N	N		
2R1	GS CDE-247	12- 4-56 2-21-18	Grace E. Davis	1916	2841.1	226	C	14	C	G 405	Ds	dry 20.5
3P1	GS CDE-249	8-21-56 3- 7-17			2850	7.0		14	N	N	Ds	dry 23.1
3-1	CDE-248	1917	W. M. Gray	1912.		367	C	12	N	N		
3-2	CDE-299	2-21-18	El Mirage School		2842.8		D	12	N	N		
4Q1	GS CDE-250	8-21-56 1917	T. R. Croswell	1912	2850	7.0	D	36	N	N		22.0
5B1	GS CDE-254	8-22-56 1917	W. H. Anderson	1916	2845		C	12	L	G 135	Dm	dry 27.0
5H1	GS CDE-253	8-22-56 2-16-18	Marian B. Charles	1917	2853.3	5.0	D	48	N	N	Ds	dry 36.0

T. 6 N., R. 7 W. --Continued.

6/7-5Q1	GS CDE-252	8-21-56 1917	Marian B. Charles	1912	2850	149.1 157	10 C 7	N C G	162	Un	TcN 2.0	27.01 25.0
5R1	GS	8-21-56	R. H. Tyler		2845	80	C		$\frac{1}{2}$	Dm	Na	
5R2	GS	8-21-56			2845	60		J	1	Dm	Na	
6G1	GS	8-22-56	J. A. Keagy		2905		L	G		Dm	Na	
6J1	GS	8-22-56	J. A. Herrnburger		2870	78	R	8	J	Dm	Na	30
6K1	GS	8-22-56	J. A. Herrnburger		2900	103	C	6	J	$\frac{1}{2}$	Dm	Na
6R1	GS	8-22-56			2855	29.3	D	48	N		Un	28.70
7B1	GS	8-22-56	Civil Air Patrol		2865		8	T	1	Dm	TcS 1.0	35.62
7E1	GS	8-23-56	Lazy S Ranch		2865	102.5	12	J	1	Dm	TcS 0	36.69
7N1	GS	8-23-56	Floyd M. Payne		1936	2855	41.1	D	48	W	S Tcr 0	40.26
7N2	GS	8-23-56	F. M. Payne		19361	2875		24	L	W	Dm	Na
7Q1	GS CDE-239	8-23-56 2-16-18	F. A. Forsyth		1914	2870.4	50	C 8	N N		Ds dry	37.5

Source : Date : Type : Pump data : Water level :
 of data : of : well : and : Use : Measuring:
 SGS : and : completed : (feet) : (feet) : Depth : Depth : Other
 G.S. : and : completed : (feet) : (feet) : point : to water : data
 G.S. : and : completed : (feet) : (feet) : well : below 1sd :
 G.S. : and : completed : (feet) : (feet) : (feet) : (feet) :

T. 6 N.; R. 7 W.--Continued.

17-1	CDE-240	1917	J. Dobersch		C	12	N	N		37.0	
18-1	CDE-241	1917	G. B. Flock		42	C	8	N		dry 26.0	
19-1	GS	8-21-56	T. R. Crosswell	2840	25.0	D	48	N	Ds		
19-1	CDE-251	1917	T. R. Crosswell	2840	26	D	N	N			
20-1	GS	8-24-56		2865	44.7	36	J	1	TcN	2.0	
20-1	GS	8-27-56		2865	100	6	J	G	Dn	Na	
20-1	GS	8-24-56		2875	50.2	10	L	G	Dn	TcN 1.0	
20-1	GS	8-27-56	Nelson	2875	135	C	8	J	Dn	TcN 0	
20-1	CDE-242	1917	T. S. Lindley	1914			N	N		30	
21-1	GS	12- 4-56			28.2		8	N	Ds		
21-1	CDE-243	1917	E. F. Anger	2857.1	140	D	L	G		dry 24.0	
21-1	GS	8-27-56	Briegleb	1952	2865	74	C	10	J	2	
21-1	GS	8-27-56	Briegleb	1949	2865	165	RG	12	T	G	
21-1	GS	8-29-56			20.9		48	N	N	Ds	
21-1	CDE-245	2-21-18	E. J. Krause	1916	2849.2	210	C	12	C	378	dry 21.0

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Pump data	Water level	Measuring point well (feet)	Depth to water (feet)	Other data
6/7-11R1	GS	8-29-56	P. Coldiron	2865	450	C	24	T 40	I	Tc 0	143	C
11-1	CDE-246	2-21-18	K. McDonald	2853.9	25	D	N	N	Un	TcS 1.0	20.33	W
12M1	GS F	8-29-56 CDE-300	2-21-18	2867.0	23.6	D	48	N	Un	TcS 1.0	21.0	
12N2	GS	8-29-56		2860	26.4	D	48	L	W	TerS 1.0	21.71	
12Q1	GS	8-29-56		2850	45.4		12	N	Un			
14B1	GS CDE-244	8-29-56 1917	J. Seward	2869.0	6.0	D	N	N	Ds		23.2	
14L1	GS CDE-232	8-29-56 1917	R. Atz	1912	2880	4.0	D	48	N	Ns		
14Q1	GS F-14R1	8-29-56	C. V. Pual	2900	440	R	14	T 40	1000 I			
15C1	GS	8-27-56	C. Axley	1954	2875	73	C	8 L	H	Dm	Tc 0	31.10
15C2	GS	8-27-56		2875			8	N	N	Un	Na	
15C3	GS	8-27-56	C. F. Blith	2880	46	6	L	W	Dn	TcN 1.0	30.2	

T. 6 N., R. 7 W.--Continued.

Source of data well number:	Date of observation:	Owner or user	Year com- pleted:	Altitude (feet)	Depth (feet)	Type and diam- eter:	Yield of well:	Pump data	Use of well:	Measuring point:	Depth to water:	Water level:
USGS well numbers:												

T. 6 N., R. 7 W.--Continued.

17-15R1	GS	8-27-56	W. M. Price	2910	85	D	J	$\frac{1}{2}$	Dm			54
15S1	GS	8-27-56	E. White	2910	58	C	8	N	Ds			dry 49.0
15C1	GS	8-24-56	M. B. Hoar	1953	2885	R	8	J	Dm			50
16F1	GS	8-24-56	L. F. Nelson	2925	104	R	8	J	Dm			50
16G1	GS	8-24-56	L. F. Nelson	2915	97.4	RG	6	N	Un	TcW	2.0	41.62
16M1	GS	8-24-56	Joyce Monroe	2915	100	R	7	1	Dm			40
16P1	GS	8-24-56	D. C. Allen	2915	224	R	T	10	Dm			40
17R1	GS	8-24-56		2915		8	J	1	Dm			
17T1	GS	8-23-56		2905	51.3	D	48	N	Un	TcS	1.0	46.41
17J1	GS	8-24-56	Lance Smith	2915	365	R	T	20	Na			45
17R1	GS	8-24-56	R. P. King	2915	85		8	J	Dm			40
17-1	CDE-235	4-7-17	Etta McKelvey	1916	300	C	12	N				73.5

USGS well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude : Depth (feet)	Type and diam- eter	Pump data	Type of well	Measuring point : to water (feet)	Water level dry
6/7-18Q1	GS CDE-236	8-23-56 2-17-18	W. J. Shaw	2920.8	36.0	D 48	N N	Ds	55.5	
18-1	CDE-238	1917	W. E. Anderson			D	N N			52.0
18-2	CDE-237	2-17-18	E. Bonino	2897.8		D	N N			50.0
19E1	GS	8-30-56		2930	94.8	8	N N	Un	TcS 1.5	66.80
19E2	GS	8-30-56		2930	212.8	12	J 10	Un	TcS 1.0	65.34 C
20C1	GS CDE-234	8-30-56 4-7-17	W. Huston	2920	82.8	6	N N	Un	TcN 0	65.72 65.3
21C1	GS	11- 6-56	Gregg	2915		J	E	Dm	Na	125
21C2	GS	11- 6-56	C. C. Seward	2925	120	CG 8	T 3	40	Dm	Na
21D1	GS	11- 6-56	H. H. Cotten	2920	50	6	T 1	Dm		
21D2	GS	11- 6-56	L. L. Cotten	1955	2920	170	CG 10	N	Dm	
21F1	GS	11- 6-56	Leona Napier	1937	2935	107.0	C 8	L W	Dm	Tap .7
21H1	GS CDE-220	11- 6-56 1917	J. R. Palmer	1912	2935	5.0	12	N N	Ds	48.10
					330	C 12	N N			75.05
										dry 70.0

T. 6 N., R. 7 W.--Continued.

6/7-18Q1	GS CDE-236	8-23-56 2-17-18	W. J. Shaw	2920.8	36.0	D 48	N N	Ds	55.5	
18-1	CDE-238	1917	W. E. Anderson			D	N N			52.0
18-2	CDE-237	2-17-18	E. Bonino	2897.8		D	N N			50.0
19E1	GS	8-30-56		2930	94.8	8	N N	Un	TcS 1.5	66.80
19E2	GS	8-30-56		2930	212.8	12	J 10	Un	TcS 1.0	65.34 C
20C1	GS CDE-234	8-30-56 4-7-17	W. Huston	2920	82.8	6	N N	Un	TcN 0	65.72 65.3
21C1	GS	11- 6-56	Gregg	2915		J	E	Dm	Na	125
21C2	GS	11- 6-56	C. C. Seward	2925	120	CG 8	T 3	40	Dm	Na
21D1	GS	11- 6-56	H. H. Cotten	2920	50	6	T 1	Dm		
21D2	GS	11- 6-56	L. L. Cotten	1955	2920	170	CG 10	N	Dm	
21F1	GS	11- 6-56	Leona Napier	1937	2935	107.0	C 8	L W	Dm	Tap .7
21H1	GS CDE-220	11- 6-56 1917	J. R. Palmer	1912	2935	5.0	12	N N	Ds	48.10
					330	C 12	N N			75.05
										dry 70.0

13
SN/TW
126

USGS well number	Source of data and other numbers	Date of observation	Owner or user	com- pleted	Year (feet)	Altitude: Depth (feet)	Type diam- eter:	Yield: well (gpm)	Use of power: (in.)	Measuring point: below lsd: (feet)	Water level

T. 6 N., R. 7 W.--Continued.

17-21M	GS	11- 6-56	G. L. Loucks		2940	CG 6 L	W	Dm	Tbc	0.6	75.50
21P1	GS	9-21-56			2960	C 10 L	W	Dm	TcE	1.5	93.06
21J1	GS	11- 6-56	Beau Kasta		2965	64.3 D 30	N	Ds	Tc	.8	dry
CDE-219		1917	C. B. Hawks		97	D L G	9				
22L1	GS	11- 6-56	El Mirage Water Co.		2935	219.2	12 N	Un	TcSE	1.0	58.05
22J1	GS	11-14-56	Tanner Ranch	1955	2945	137	8	Dm	Na	87	L
22R1	GS	11- 7-56			2955	6 T	G	Dm	Tcc	.6	90.80
22-1	CDE-221	4- 6-17	C. Williams		425	C 12 A	G 117				73.0
24M1	GS	11- 7-56			26.8	D 60	N	Ds			dry
CDE-222		2-21-18	D. Anderson	2922.0	61	D N	N				57.0
24R1	GS	11- 7-56	H. Braden		94.1	C 12	N	Un	TcS	1.7	87.85
CDE-223		3- 7-17				C N	N				88.6
26M1	GS	11- 7-56	W. Campbell	1916	3010	126.9 D 36	N	Un	Tbc	0	126.67
CDE-218		1917	W. Campbell		400	C 12 C	G 225				W
26R1	GS	11- 7-56	H. L. Notterman	3005		12 N	N	Un	TcS	--5	106.03

Table 1
6N/7W

127

Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and diam- eter	Pump well and power (in.)	Type well	Pump data	Use of well	Measuring point (feet)	Depth to water (feet)	Other data below 1st	Water level
--	---------------------------	---------------	------------------------	--------------------	-----------------	------------------------------	---------------------------------------	--------------	--------------	-------------------	------------------------------	-----------------------------	----------------------------	-------------

T. 6 N., R. 7 W.--Continued.

6/7-27M1	GS	11- 7-56	H. M. Engebretson	1915	3020	150	D	N	N	Tc	1.0	134.9C	W	
CDE-217		1917					L	G	9			135.0		
27R1	GS	9-21-56			3010	273.9	C	12	L	W	S	TcE	.5	117.81
28B1	GS	11- 7-56			2975	106.6	D	36	N	N	Un	TcE	.3	101.10
28P1	GS	11- 7-56			3020	120.4		8	N	N	Un	Tc	.9	118.30
29F1	GS	9-21-56	F. P. Yober	1942	2970	138	CG	10	L	W	Dm, S	TcE	.3	100.8C
29M1	GS	9-21-56	Barbara Oliver		3015	150	C	L	W		Dm	TcW	0	128.10
29P1	GS	9-21-56		1956	3005	117.7	C	8	N	N	TcN	2.5	114.70	
30-1	CDE-216	1917	Paul Showers	1915	295	C	12	L	G			8G.C		
30-2	CDE-317	1917	W. W. McKinney		159	D	N	N						139.0
31Q1	GS	9-21-56			3060	379.7	C	12	N	N	Un	TcS	1.0	159.70
31-1	CDE-215	4- 7-17	G. W. Phenice	1915	410	C	12	N	N					153.4

USGS Well number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type of well	Pump date	Use Measuring: point well (in.)	Water level Depth below 1sd: (feet) (feet)
<u>T. 7 N., R. 6 W.</u>										
7/1-31H1	GS	11-28-56	V. C. Garrish Co.	3075	300	C	8	L	G	Tc 0.3 d276.10
31H2	GS	11-28-56	V. C. Garrish Co.	3070	157.6	C	N	N		ur,
31K1	GS	11-28-56	V. C. Garrish Co.	3045	201.2	C	12	N	Ur	TcN 1.4 143.03
<u>T. 7 N., R. 7 W.</u>										
17-3M	GS	8- 8-56	S. H. McClung	1956	2930	145	R	10	L	Dm Na 48
7F1	GS	8- 8-56	Smith	2944	58.2	D	48	L	Un Tcr 1.0	52.85
7P1	GS	8- 8-56	D. E. Brown	2960	60	R	10	L	Dm Na	46
8E1	GS	8- 9-56	CDE-261 1917 J. Young	2890	101.8	D	N	N	Un Tcr 0	98.63 95.0
17Q1	GS	8- 9-56	I. Tibess	2880		L	W	W	Un Tcc 0	68.8
19M	GS	8- 9-56	J. Wegner	2935	200	8	L	W	Dm	a150
20G1	GS	8- 9-56	I. Tibess	2870		L	W	W	Dm Na	

- a. Pumping.
d. Tape smears.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and size of well	Pump data	Use of well	Measuring: Type and size of well	Depth to water	Water level
22L1	GS	8-16-56	J. F. Martin	1923	2870	96	D 10 L	W	Dm	Na	45	
22-1	CDE-259	1917	C. Munsey	1913	2900	101.0	8 N	N	TcN	2.0	82.74	
26M1	GS CDE-295	8-20-56 2-14-18	Gilbert	1917	2891.0	42.4	D 52 N	N	Ds		78.0	
27F1	GS CDE-260	8-15-56 2-16-18	L. Hess	1917	2862.9	125	C 10 C	36 J 1 G 675	Dm	Na	74.0	
27L1	GS	11-6-57 8-15-56	Albright	2835	231.7	18	N	N	Un	TcN TcN	1.0 1.0	32.71 31.45
28A1	GS	8-15-56		2845	64.3	12	N	N	Un	TcS	3.0	34.40
28K1	GS	8-14-56		2835	43.8	12	N	N	Un	TcS	3.0	21.85
28L1	GS	8-15-56		2850			N	N	Un	Na		
28Q1	GS	8-14-56		2835		12	N	N	Un	Tcc	3.0	18.76
28-1	CDE-258	2-16-18	L. L. Whitlock	2848.0	93	C 7 C	G					31.0

T. 7 N., R. 7 W.--Continued.

Source of data and other numbers	Date of observation	Owner or user	Year completed	Type of well	Pump data	Water level
USGS 32F1	8-14-56	Northan	1951	2865	78.0 R 12 N	Ds
32F2	8-14-56	Northan	2870	149.0 R 10 N	Un	TcW 1.5 120.65
32F3	8-14-56	Northan	2870	104.5 RG 12 N	Un	TcS 0 98.32
32F4	8-14-56		2860	8 J 1	Dm	Na
32H1	8-10-56	E. F. Doerschel	2866	60 10 L W	Dm	Na
32H2	8-10-56	E. F. Doerschel	2845	38 J $\frac{1}{2}$	Dm	Na
32R1	8-14-56	D. T. Stokes	2855	41.0 8 L W	Un	TcS 1.0 25.96
32R2	8-14-56	D. T. Stokes	2855	60 10 J $\frac{1}{2}$	Dm	Na
32R3	8-14-56	D. T. Stokes	2855	60 10 L G	Un	Na
32-1	CDE-257	2-16-18 C. W. Brockman	1915	2843.3 80 C 12 N		27.0
34C1	GS	8-15-56 Ana Lang	2845	30 R L 1	Dm	Na
35C1	GS	8-20-56 William Jensen	2850	181.1 12 N N	Un	TcS 2.0 39.71

T. 7 N., R. 7 W.--Continued.

Source of data and other numbers	Date of observation	Owner or user	Year com- pleted	Altitude (feet)	Depth (feet)	Type and diam- eter (in.)	Pump well power (Epm) (in.)	Use of well (Epm)	Measuring point below 1st (feet)	Water level (feet)	Other data
USGS well number											

T. 7 N., R. 7 W.--Continued.

7/7-35D1	GS	8-20-56		2845	7	D	84	N	N	Ds	
	CDE-294	2-14-18	B. M. Elsey	2857.0	44	D	N	G	G		dry
35G1	GS	12- 4-56	L. C. Wheeler	2859.3	39.6	D	48	N	N	Ds	
	CDE-256	2-14-18				D	C	G	G		dry
35-1	CDE-297	2-21-18	John Breen	2837.5	25	D	N	N	N	Ds	
35-2	CDE-293	2-14-18	W. J. Jensen	2853.0	203	C	12	N	N		20.0
36P1	GS	8-16-56	Louis Hembrick	2850	80.0	C	8	J	G	Dm	TcN O
36P2	GS	8-16-56	Louis Hembrick	2850	44.0	D	84	N	N	Un	TcN O
											37.14 C

132
73

Table 2.- Cross index of other well numbers and Geological Survey numbers

The first column shows the number assigned to the well by the other agency indicated and the second column shows the Geological Survey number assigned to the same well. The numbers of the other agencies are listed consecutively. Numbers missing in the consecutive listings are for wells outside the Upper Mojave Valley area, for wells for which no data are available, or for wells for which the other numbers and Geological Survey numbers are the same.

Part 1

California Department of Engineering (CDE) 1918, and Thompson (DGT) 1929					
CDE number	USGS number	CDE number	USGS number	CDE number	USGS number
1	3/3-7M3	11	4/4-36Q1	21	4/3-29E2
2	3/3-7F5	12	4/3-31P1	22	4/3-29E1
3	3/3-7F3	13	4/3-31-1	23	4/3-20N1
4	3/3-6P1	14	4/3-30G1	24	4/3-20-2
5	3/4-1-1	15	4/3-20D2	25	4/3-20P1
6	3/4-1-2	16	4/3-30D1	26	4/3-20D1
7	3/4-1-3	17	4/3-19-3	27	4/3-17-1
8	3/3-6E1	18	4/3-19-1	28	4/3-17D1
9	4/4-36Q4	19	4/3-19-2	29	4/3-7R1
10	4/4-36R3	20	4/3-30R3	30	4/3-7K1

CDE number	:	USGS number	:	CDE number	:	USGS number	:	CDE number	:	USGS number
31		4/3-7M1		55		5/4-36N4		79		4/3-9N1
32		4/3-6N1		56		5/4-24C1		80		4/3-10P1
33		4/3-7G2		57		5/4-24-1		81		4/3-10R1
34		4/3-6E2		58		5/4-25H1		82		4/3-5P1
35		4/3-6-1		59		5/3-19N1		83		4/3-4E1
36		5/4-36H1		60		5/3-31D1		84		4/3-4-1
37		5/4-14P1		61		5/3-30N3		85		4/3-3B1
38		5/4-14P3		62		5/3-30N1		86		4/3-3R1
39		5/4-14P2		63		5/3-30-1		87		4/3-2F2
40		5/4-15C1		64		5/3-31-1		88		4/3-2B1
41		5/4-26G1		65		5/3-31-2		89		4/3-2R1
42		5/4-26G2		66		5/3-31R1		90		4/3-1M1
43		5/4-26J2		67		4/3-6D1		91		4/3-1-1
44		5/4-26-1		68		4/3-6G2		92		4/2-6N1
45		5/4-26R1		69		4/3-5N3		93		4/2-6E1
46		5/4-35A3		70		4/3-5D1		94		5/3-26R1
47		5/4-35A1		71		4/3-8D2		95		5/3-34F1
48		5/4-35A2		72		4/3-7A1		96		5/3-33-1
49		5/4-35H1		73		4/3-8M1		97		4/3-5A1
50		5/4-35H2		74		4/3-8P1		98		5/3-33M1
51		5/4-35-1		75		4/3-17L1		99		5/3-32-1
52		5/4-36N1		76		4/3-20-1		100		5/3-32L1
53		5/4-36P1		77		4/3-21-1		101		5/3-32H1
54		5/4-26-1		78		4/3-8-1		102		5/3-28N1

CDE number	:	SGS number	:	CDE number	:	USGS number	:	CDE number	:	USGS number
103		5/3-29-1		127		5/3-8N1		151		4/2-8-1
104		5/3-27N1		128		5/3-22E1		152		4/2-5H3
105		5/3-28A1		129		5/3-8G1		153		4/2-4E1
106		5/3-22N1		130		5/3-8-3		154		5/2-32F1
107		5/3-22-1		131		5/3-9-1		155		5/2-32G1
108		5/3-26-1		132		5/3-9J1		156		4/2-4B1
109		5/3-26H1		133		5/3-10M1		157		4/2-4G1
110		5/2-30D1		134		5/3-10K1		158		4/2-4-1
111		5/3-24-1		135		5/3-10-1		159		4/2-10D1
112		5/3-24E1		136		5/3-12H1		160		4/2-10G1
113		5/3-24D1		137		5/2-18D1		161		4/2-14C1
114		5/3-14-1		138		5/3-12-1		162		4/2-12G1
115		5/3-14N1		139		5/3-12F1		163		4/2-12H1
116		5/3-14E1		140		5/3-2-1		164		4/2-1H1
117		5/3-14D1		141		5/3-2M1		165		4/1-6E1
118		5/3-20-1		142		5/3-2-2		166		4/1-6-1
119		5/3-20F1		143		5/3-4G1		167		4/1-6E2
120		5/3-18R1		144		5/3-4-1		168		4/1-5N1
121		5/3-18-1		145		6/3-34L1		169		4/1-5N2
122		5/3-18-2		146		6/3-28R1		170		4/5-35C1
123		5/3-18F1		147		6/3-28Q1		171		4/6-15J1
124		5/3-18-3		148		5/3-7-1		172		4/5-22H1
125		5/3-8-1		149		5/3-6N1		173		5/6-35G1
126		5/3-8-2		150		4/2-5N1		174		4/5-5R1

CDE number	:	USGS number	:	CDE number	:	USGS number	:	CDE number	:	USGS number
175		5/6-22J1		214		5/6-6N1		238		6/7-18-1
176		5/6-22-1		215		6/7-31-1		239		6/7-7Q1
177		4/5-12P1		216		6/7-30-1		240		6/7-7-1
178		4/4-21C1		217		6/7-27N1		241		6/7-8-1
179		5/5-18-1		218		6/7-26N1		242		6/7-9R1
180		5/5-15-1		219		6/7-21Q1		243		6/7-10E1
181		5/5-20-1		220		6/7-21H1		244		6/7-14B1
182		5/4-16Q1		221		6/7-22-1		245		6/7-11G1
183		5/5-22-1		222		6/7-24M1		246		6/7-11-1
184		5/5-22M1		223		6/7-24R1		247		6/7-2M1
185		5/5-22E1		224		6/6-30K2		248		6/7-3-1
186		5/5-12R1		225		6/6-30K1		249		6/7-3P1
187		5/5-12-1		226		6/6-32K1		250		6/7-4Q1
188		5/5-13D1		227		6/6-28F1		251		6/7-9D1
189		5/5-2-1		228		6/6-28H1		252		6/7-5Q1
190		5/5-2H1		229		6/6-18Q1		253		6/7-5M1
191		5/5-8R1		230		6/6-18-1		254		6/7-5B1
192		5/6-12F2		231		6/6-18-2		255		6/6-7B1
193		5/5-6P1		232		6/7-14L1		256		7/7-35G1
209		5/7-5P1		233		6/7-15Q1		257		7/7-32-1
210		5/7-9H1		234		6/7-20C1		258		7/7-28-1
211		5/7-5-1		235		6/7-17-1		259		7/7-22-1
212		5/7-2Q1		236		6/7-18Q1		260		7/7-27F-
213		5/7-12P1		237		6/7-18-2		261		7/7-8E1

Part 2

U-numbers assigned by all agencies doing ground-water work prior to July 1, 1943, when the Geological Survey numbering system was adopted (U. S. Geological Survey, 1945).

U number	: USGS number	U number	: USGS number	U number	: USGS number
1	3/4-13B1	18	4/3-10R1	39	4/3-6N1
2	3/4-12Q1	18a	4/3-10R2	40	4/3-7G2
3	3/3-7M3	19	4/3-1M1	41	5/4-36P3
4	3/4-12J1	20	4/2-6N1	42	4/4-1-1
4a	3/4-1R2	21	4/2-5N1	43	4/3-6D1
5	3/4-1Q1	22	4/2-5H3	43a	4/3-6D2
6	3/3-6E1	23	4/3-19-1	44	4/3-6A1
6a	3/3-6E2	25	4/3-17L1	45	5/3-32L1
7	3/4-1-4	26	4/3-17E1	46	5/3-33-2
7a	3/4-1C2	27	4/3-18-1	47	5/3-31D1
8	4/3-31I5	28	4/3-18E1	48	5/3-30N3
9	4/3-30D1	28a	4/3-18E2	49	5/4-25H1
9a	4/3-30E1	29	4/3-17-1	50	5/4-24C1
10	4/3-29E1	30	4/3-18-2	51	5/3-26H1
11	4/3-30G1	31	4/3-5P1	52	5/3-24D1
12	4/3-19-4	32	4/3-8-1	52a	5/3-14-1
13	4/3-19R1	33	4/3-10P1	53	5/3-22-1
14	4/3-20N1	34	4/3-7K1	54	5/3-9J1
15	4/3-20P1	35	4/3-7M1	55	5/3-9-1
16	4/3-20K1	36	4/4-12-2	56	5/3-8-2
17	4/3-21-1	37	4/4-1R1	57	5/3-18F1

139
Table 2

U number	:	USGS number	:	U number	:	USGS number	:	U number	:	USGS number
58		5/3-18-2		66		5/4-26J2		74		5/4-35N1
59		5/4-11P1		67		5/4-26J1		75		4/4-12B1
59a		5/4-11P2		68		5/4-35A1		75a		4/4-12-1
61		5/4-10M1		69		5/4-26R1		76		4/4-13B2
62		5/4-15C1		70		5/4-35-2		77		4/4-13J1
63		5/4-16Q1		71		5/4-35H2		78		4/4-13R1
64		5/4-27C4		72		5/4-36N1		79		4/3-19-3
65		5/4-26Q2		73		4/4-1D1				

Part 3

U. S. Bureau of Reclamation (BR), unpublished data, Boulder City, Nev.

USBR number	:	USGS number	:	USBR number	:	USGS number
7		6/6-18N1		34		5/3-35N1
28		6/3-9E4		35		5/3-32H1
30		6/3-28R1		36		4/1-18E1
31		5/3-3E1		42		3/5-14D1
32		5/3-22A1		43		3/4-28P1
33		5/3-24N1		44		3/4-32C1

Part 4

San Bernardino County Flood Control District (F), given only where different from Geological Survey number.

F number	:	USGS number	:	F number	:	USGS number
3/4-29P1		3/4-32C1		5/5-4D1		5/5-5A1
3/5-15A1		3/5-14D1		5/5-22N1		5/5-22E1
4/3-6A2		4/3-6A1		6/2-33X1		6/2-34M1
4/3-19G1		4/3-19-1		6/3-9E1		6/3-9E4
4/3-20L1		4/3-20P1		6/3-9P1		6/3-9E2
4/3-30E1		4/3-30D1		6/5-33L1		5/5-4C1
4/4-26G1		4/4-25N1		6/6-18P1		6/6-18Q2
4/4-26M1		4/4-26Q1		6/6-24A1		6/6-24H1
4/4-28C1		4/4-28E1		6/6-28E1		6/6-28F1
5/3-3D1		5/3-3E1		6/6-32P1		6/6-32K1
5/3-9K1		5/3-9-1		6/7-14R1		6/7-14Q1

Table 3.- References that contain water-level measurements in wells in the Upper Mojave Valley area, Calif.

Years for which measurements are available	Reference ^{1/}	Year of publication
1912, 1917-18	California Department of Engineering	1918
1905-32	California Division of Water Resources	1934
1946-50	San Bernardino County Flood Control District	1951
1951-52	San Bernardino County Flood Control District	1954

U. S. Geological Survey Water-Supply Papers^{1/}

Years for which measurements are available	No. of Water Supply Paper	Year of publication	Years for which measurements are available	No. of Water Supply Paper	Year of publication
1912, 1917-18	578	1929	1947	1101	1951
1928			1948	1131	1951
a1905-39	886	1940	1949	1161	1952
1940	911	1941	1950	1170	1953
1941	941	1943	1951	1196	1954
1942	949	1944	1952	1226	1955
1943	991	1945	1953	1270	1956
1944	1021	1947	1954	1326	1957
1945	1028	1949	1955	1409	1957
1946	1076	1949			

l. For complete titles see references.

a. Measurements for years prior to 1932 are reprinted from earlier publications cited above.

Table 4.- Wells for which periodic water-level records are available

(Published and unpublished data)					
USGS No.	F No. ^{1/}	: CDE or DGT : US ER No. ^{2/}	: U No. ^{3/} :	Records available (years) ^{4/}	
3/3-6E1		U-6	8	1915, 1917, 1929-32 1935-55, 1957	
6E2		U-6a		1946, 1948-57	
7M3		U-3	1	1917, 1930-32, 1957	
3/4-1C2		U-7a		1931-32	
1Q1		U-5		1913, 1917, 1931	
IR2		U-4a		1932, 1957	
1-4		U-7		1930-31	
12J1		U-4		1929-32, 1935-52, 1956	
3/4-12Q1		U-2		1929, 1931-32, 1957	
13B1		U-1		1922-23, 1929-33, 1935-57	
13B2				1951, 1953-57	
28P1			43	1950, 1953-57	
28P2				1956-57	
32C1	32D1		44	1950, 1953-57	
3/5-14D1	15A1		42	1950, 1953-57	
4/1-18E1			36	1948, 1953-57	
4/2-5H3		U-22	152	1917, 1930-32	
5N1		U-21	150	1923, 1930-33, 1935-41	
6N1		U-20	92	1917, 1923-32	
4/3-1M1		U-19	90	1917, 1930-33, 1939-43 1945-54, 1955-56	
5P1		U-31	82	1917, 1931-32, 1939-47	
6A1	6B1	U-44		1931-32, 1934, 1939-57	
6A2	6B1			1955-57	
6D1		U-43	67	1917, 1930-34, 1939-57	
6D2		U-43a		1949-57	
4/3-6N1		U-39	32	1906-07, 1917, 1930-32	
7G2		U-40	33	1904-05, 1907, 1911	
7K1		U-34	30	1917, 1930-33	
7M1		U-35	31	1918?, 1931-32, 1956	
8-1		U-32	78	1917, 1931	
4/3-10P1		U-33	80	1917, 1931, 1956-57	
10R1		U-18	81	1917?, 1930-32, 1956	
10R2		U-18a		1931-33, 1935-40, 1956	

USGS No.	F No. <u>1</u> /	U No.	CDE or No. <u>2</u> /	DGT No. <u>3</u> /	US ER No. <u>3</u> /	Records available (years) <u>4</u>
4/3-17E1		U-26				1905, 1916, 1922-23, 1930-49, 1951-52
17L1		U-25	75			1917, 1930-32, 1934, 1956
17-1		U-29	27			1917, 1930-32, 1934
I8E1		U-28				1930-32, 1935, 1938-57
18E2		U-28a				1930-32
4/3-18-1		U-27				1905, 1911, 1930-38
18-2		U-30				1931-32
19R1		U-13				1905, 1907, 1930-55
19-1	19G1	U-23	18			1917, 1931-51
19-3		U-79	17			1917, 1931
4/3-19-4		U-12				1906-07, 1932
20K1		U-16				1931-37, 1939-41, 1944-45, 1956
20N1		U-14	23			1917, 1930-43
20P1	20L1	U-15	25			1917, 1923, 1930-52, 1954, 1956-57
21-1		U-17	77			1917, 1923, 1930-42, 1944-50
4/3-29E1		U-10	22			Arrowhead 1905, 1907, 1917, 1931, 1956
30D1	30E1	U-9	16			1917, 1930-32, 1935-52, 1954, 1956
30E1		U-9a				1930, 1957
30G1		U-11	14			1917, 1931-32, 1957
31I5		U-8				Arrowhead 1905, 1909, 1930-32, 1956
4/4-1D1		U-73				Arrowhead 1905, 1920,
IR1		U-37				1930-33, 1956
1-1		U-42				Arrowhead 1905, 1916
12B1		U-75				Arrowhead dry 1905, 1916, 1931-32, 1957
12-1		U-75a				1931-32

USGS No.	: F. No. 1/	: U No.	: CDE or No. 2/	DGT No. 3/	USBR No. 4/	Records available (years) 4/
4/4-12-2		U-36				Arrowhead 1905, 1907
13B2		U-76				1931-32, 1957
13J1		U-77				1930-31, 1957
13R1		U-78				1931-32, 1957
25N1	26G1					1952-57
4/4-26Q1	26M1					1952-57
28E1	28C1					1949-54, 1957
5/3-3E1	3D1			31		1948-49, 1951-57
8-2	U-56	127				1917, 1931
9J1	U-54	132				1917, 1930-32
9-1	9K1	131				1917, 1930-33, 1935, 1937-49
13D1						1948-57
5/3-14-1	U-52a	114				1917, 1931-32
18F1	U-57	123				1917, 1923, 1930-33, 1935, 1937-53, 1955-57
18-2	U-58	122				1917, 1923, 1930-32
22A1				32		1948-57
22-1	U-53	107				1917, 1923, 1930-32
5/3-24D1	U-52	113				1917, 1931-33, 1957
24N1				33		1948-57
26H1	U-51	109				1917, 1923, 1930-33
30N3	U-48	61				1917, 1930-32
31D1	U-47	60				1905, 1917, 1930-32
5/3-32H1				35		1917, 1950, 1954-57
32L1	U-45	101				1917?, 1931, 1956
33-2	U-46	100				1931-32
35N1				34		1950, 1953-57
5/4-10M1	U-61					1930-32, 1935, 1937-45, 1947-57
11P1	U-59					1931-32, 1935-57
11P2	U-59a					1931-32, 1935-54, 1956-57
15C1	U-62	40				1917, 1930-31, 1957
16Q1	U-63	182				1917, 1930-31, 1957
5/4-24C1	U-50	56				1917, 1930-32, 1957
25H1	U-49	58				1905, 1922, 1930-31, 1956
26J1	U-67					1931, 1957
26J2	U-66	43				1917, 1930-31, 1956
26Q2	U-65					1930-32, 1957

USGS No.	F No. ¹	U No.	CDE or No. ²	UGT No. ³	Records available (years) ⁴
5/4-26R1		U-69	45	45	1917, 1930-31, 1956
27C4		U-64			1930-33, 1957
35A1		U-68	47		1917, 1930-31, 1940, 1945, 1948-57
35H2		U-71	50		1917, 1930-31, 1956
35N1		U-74			1930-33, 1957
5/4-35-2		U-70			1930-31
36N1		U-72	52		1917, 1930-45, 1949-50, 1953, 1955-57
36P3		U-41			1931-32
5/5-4C1	33L1				1948-57
22E1	22M1		185		1918, 1947-57
6/2-34M1	33X1				1954-57
6/3-9D1					1953, 1955-57
9D2					1953-57
9E2	9P1				1953-57
9E4	9E1		338	28	1918, 1950, 1953-57
17B1			340		1917, 1953-57
28R1			146	30	1917, 1946, 1948-54, 1956-57
6/6-14P1			292		1918, 1947-57
14R1			316		1918, 1928, 1947-57
18Q2	18P1				1947-57
21A1					1947-51, 1955-57
24H1	24A1				1947-57
6/6-28F1	28E1		227		1918, 1947-49, 1954
28H1			228		1918, 1952-57
32K1	32P1		226		1918, 1947, 1949-57
6/7-12N1			300		1918, 1947-50, 1952-57
14Q1	14R1				1950-57
26N1			218		1917, 1928, 1947-57
26R1					1950-57
27N1			217		1918, 1947-57

1. San Bernardino County Flood Control District numbers are shown only where different from U. S. Geological Survey numbers.

2. California Department of Engineering (1918) data are also shown in WSP 578 by D. G. Thompson (1929) who included 11 additional wells.

3. U. S. Bureau of Reclamation measurements have not been published previously and are included herein.

4. See table 3 for references to published water-level measurements see table 1 or 5 for unpublished water-level measurements.

Table 5-- Records of water levels in wells

Table 5 includes all unpublished records for wells having more than five water-level measurements; wells having less than five measurements are shown in table 1. Also included in this table are the complete published and unpublished records for wells 4/3-18E1, 5/3-22A1, 5/4-11P1, 5/4-36N1, 6/6-14R1, 6/6-32K1, and 6/7-12N1, which have been selected as representative to show the range of water-level fluctuation in various parts of the Upper Mojave Valley area.

Altitudes given are in feet above mean sea level for the land-surface datum at the well. Land-surface datum is a plane of reference which approximates land surface. Altitudes given in whole feet are interpolated from topographic maps. Altitudes given in feet and tenths were determined by spirit leveling (from U. S. Bureau of Reclamation records).

Measurements. Most of the water-level measurements were made by the U. S. Geological Survey (GS) mainly in years prior to 1954; by the U. S. Bureau of Reclamation (BR) mainly in 1946 and 1947; and by the San Bernardino County Flood Control District (F) mainly in years since 1953. All measurements of water level have been adjusted to depth below land-surface datum. That is, the altitudes of the measuring points as reported above or below land-surface datum have been subtracted from or added to the water-level measurements.

3/3-6E1 (U-6, CDE-8). McBain, formerly Spranger. Depth about 30 feet. Altitude is about 2,940 feet. Records available: 1915, 1917, 1929-32, 1953-57. Records furnished: 1946-47, BR; 1948-53, GS; 1954-57, F; except as indicated.

		Water level		Water level		Water level
	Date		Date		Date	
Aug.	6, 1946	21.7	Mar. 19, 1947	5.5	Jan. 15, 1951	dry
	20	23.1	Apr. 8	5.3	June 13	dry
	28	23.9	29	5.3	Jan. 21, 1952	5.5
Sept.	5	24.6	May 13	9.1	Feb. 11	5.4
	12	25.1	26	11.4	Mar. 12	4.9
Sept.	19	25.7	June 9	13.8	Apr. 8	3.6
	26	26.3	23	16.6	May 28	4.7
	29	20.6	July 8	19.9	June 11	5.2
Oct.	2	26.9	22	22.2	July 14	15.4
	9	28.1	Aug. 6	24.4	Aug. 19	22.1
Oct.	16	33.4	Apr. 14, 1948	6.7	Sept. 15	25.6
	22	32.4	June 14	18.6	Oct. 15	27.6
	29	32.0	July 13	24.0	Nov. 24	27.6
Nov.	5	32.1	Aug. 10	28.4	Jan. 15, 1953	32.3
	19	6.7	Sept. 14	dry	Feb. 16	dry
Nov.	26	5.6	Jan. 23, 1950	dry	Apr. 13	27.8
Dec.	5	5.7	Feb. 15	6.1	May 11, 1954	4.9
	16	5.7	Mar. 14	17.0	Apr. 12, 1955	8.4
Jan.	21, 1947	5.4	Apr. 18	11.3	Dec. 8	dry ^a
Feb.	3	5.4	May 5	21.1	Mar. 6, 1956	dry ^a
Feb.	19	5.3	June 14	28.4	Apr. 30, 1957	29.4
Mar.	4	5.3	July 14	dry		

a. Measurement by Geological Survey.

3/3-6E2 (U-6a). McBain, formerly Spranger. Depth about 61 feet.
 Altitude is about 2,940 feet. Records available: 1946, 1948-57. Records furnished: 1946, BR; 1948-May 1956, GS; November 1953-1957, F; except as indicated.

	Date	Water level		Date	Water level		Date	Water level
July	29, 1946	20.6		Aug. 17, 1949	26.6		Nov. 26, 1951	57.27
Aug.	6	21.6		Sept. 14	29.9		Dec. 12	58.38
	20	23.1		Oct. 18	33.6		Jan. 21, 1952	5.05
	28	23.9		Nov. 14	35.91		Feb. 11	5.18
Sept.	5	24.6		Dec. 13	37.8		Mar. 12	4.57
Sept.	12	25.1		Jan. 23, 1950	36.5		Apr. 9	4.19
	19	25.7		Feb. 15	5.7		May 28	4.49
	26	26.3		Mar. 14	17.3		June 11	5.02
Oct.	2	26.9		Apr. 18	11.13		July 14	15.70
	9	28.1		May 5	20.89		Aug. 19	20.90
Oct.	22	32.4		June 14	28.0		Sept. 15	25.0
Apr.	7, 1948	20.8		July 14	31.9		Oct. 15	28.3
	14	4.7		Aug. 14	35.6		Nov. 24	32.05
June	3	14.0		Sept. 13	38.7		Jan. 15, 1953	26.48
	14	17.0		Oct. 16	41.3		Feb. 16	29.82
July	13	23.5		Nov. 3	41.8		Mar. 16	30.80
Aug.	10	28.0		Dec. 15	44.0		Apr. 13	25.99
Sept.	14	33.6		Jan. 15, 1951	45.4		May 26	30.80
Oct.	13	35.6		Feb. 13	46.65		Nov. 6	48.77
Nov.	24	37.8		Mar. 19	48.0		May 11, 1954	4.50
Dec.	9	38.5		Apr. 17	51.4		Nov. 16	37.80
Feb.	17, 1949	41.5		June 13	51.07		Apr. 12, 1955	9.10
Mar.	16	4.8		July 16	52.48		Dec. 8	44.40
Apr.	13	4.6		Aug. 13	53.88		Mar. 6, 1956	a32.85
May	11	6.1		Sept. 10	54.83		29	35.64
June	16	14.7		Oct. 15	56.17		Dec. 18	53.07
July	13	21.1					Apr. 30, 1957	27.76
							Nov. 5	a45.89

a. Measurement by Geological Survey.

3/4-13B1 (U-1). Pittinger, formerly Olive. Depth unknown. Altitude is about 3,005 feet. Records available: 1922-23, 1929-33, 1935-57. Records furnished by F except as indicated.

Date	Water level	Date	Water level	Date	Water level
Nov. 6, 1953	83.80	Feb. 16, 1956	a83.50	Apr. 30, 1957	81.66
Apr. 12, 1955	83.30	Apr. 5	82.11		
Dec. 8	84.75	Dec. 18	dry		

3/4-28P1 (BR-43). Las Flores Ranch. Depth about 340 feet. Altitude is 3,168.6 feet. Records available: 1950, 1953-57.

Nov. 3, 1950	b16.8	Nov. 16, 1954	c10.30	Dec. 18, 1956	c19.45
Nov. 6, 1953	b13.5	Apr. 12, 1955	c4.90	Apr. 30, 1957	c3.17
May 11, 1954	c8.95	Apr. 5, 1956	a4.80		

3/4-32C1 (BR-44, F-29P1). Las Flores Ranch. Depth about 60 feet. Altitude is 3,187.0 feet. Records available: 1950, 1953-57.

Nov. 3, 1950	b12.9	Nov. 16, 1954	c9.70	Apr. 5, 1956	a9.85
Nov. 6, 1953	c12.60	Apr. 12, 1955	c8.26	Dec. 18	c13.43
May 11, 1954	c7.00	Dec. 5	c11.30	Apr. 30, 1957	c11.45

3/5-14D1 (BR-42, F-15A1). Las Flores Ranch. Depth about 276 feet. Altitude is 2,602.3 feet. Records available: 1950, 1953-57. Records furnished by F except as indicated.

Nov. 3, 1950	b240	Apr. 12, 1955	239.50	Apr. 30, 1957	241.54
Nov. 6, 1953	243.30	Dec. 9	243.20	Nov. 5	a242.91
Nov. 16, 1954	236.55	Apr. 5, 1956	a240.85		

4/1-18E1 (BR-36). George McCarthy. Depth about 200 feet. Altitude is 2,968.1 feet. Records available: 1948, 1953-57.

Nov. 13, 1948	b62.1	May 12, 1954	c44.2	Dec. 18, 1956	c56.63
Dec. 2	b67.69	Nov. 16	c43.5	Jan. 3, 1957	a56.88
Nov. 9, 1953	c45.7	Apr. 13, 1955	c37.99	May 1	c56.20
Feb. 5, 1954	a56.98	Dec. 9	c49.40		

4/3-6A1 (F-6B1, U-44). New Way Laundry, formerly A. J. Lintner. Depth about 99 feet. Altitude is 2,871.91 feet. Records available: 1931-32, 1934, 1939-57. Except for the measurement of June 13, 1956, it appears likely that these measurements were inadvertently made in well 6A2 and reported for well 6A1 (F-6B1). (See tables 1 and 4.)

Apr. 12, 1955	c71.89	Apr. 5, 1956	c68.50	Dec. 18, 1956	c70.71
Dec. 9	c68.57	June 13	a70.92	Apr. 30, 1957	c70.79

a. Measurement by Geological Survey.

b. Record from Bureau of Reclamation.

c. Record from San Bernardino County Flood Control District.

4/3-6D1 (U-43, CDE-67). W. J. Smithson, formerly Phillips. Depth about 100 feet. Altitude is 2,866.5 feet. Records available: 1917, 1930-34, 1939-57. Records furnished: 1946-47, BR; 1948-52, GS; 1955-57, F; except as indicated.

	Water Date	level	Water Date	level	Water Date	level
July	29, 1946	52.3	Sept. 3, 1947	53.9	Dec. 15, 1950	59.7
Aug.	6	52.5	Oct. 9	54.6	Jan. 15, 1951	59.0
	20	52.6	Nov. 12	53.5	Feb. 13	58.8
	29	53.2	Dec. 8	53.0	Mar. 19	58.7
Sept.	5	52.9	Jan. 7, 1948	52.7	Apr. 17	59.57
Sept.	12	52.9	Feb. 16	52.7	June 13	61.26
	19	52.9	Mar. 10	52.8	July 16	60.44
	26	53.0	Apr. 14	53.3	Aug. 13	60.21
Oct.	2	52.9	June 14	54.7	Sept. 10	63.99
	9	52.9	July 13	57.8	Oct. 15	64.17
Oct.	16	52.8	Aug. 10	56.3	Dec. 12	62.32
	22	52.7	Sept. 14	57.1	Jan. 21, 1952	64.34
	29	52.7	Oct. 13	57.0	Feb. 11	60.10
Nov.	5	52.7	Dec. 9	55.7	Mar. 12	54.11
	19	52.4	Jan. 17, 1949	55.2	Apr. 9	58.94
Nov.	26	52.3	Feb. 17	55.1	June 11	59.5
Dec.	5	52.0	Mar. 16	55.1	July 14	60.08
	16	51.8	Apr. 13	56.0	Aug. 19	60.90
Jan.	7, 1947	52.0	June 16	57.5	Sept. 15	61.5
	21	51.2	July 13	58.6	Oct. 15	60.9
Feb.	3	51.0	Aug. 17	58.7	Dec. 15	59.21
	19	50.9	Sept. 14	59.3	Apr. 12, 1955	62.80
Mar.	4	51.0	Oct. 18	59.2	Mar. 29, 1956	64.65
	19	51.0	Dec. 13	57.6	June 20	a66.62
Apr.	8	51.5	Jan. 23, 1950	56.7	Nov. 5	69.78
Apr.	29	51.5	Feb. 15	56.6	Dec. 5	67.10
May	13	51.6	Mar. 14	56.8	Jan. 2, 1957	66.86
	26	51.8	Apr. 18	57.7	Feb. 6	65.96
June	9	52.0	June 14	59.3	Mar. 6	65.82
	23	52.2	July 14	60.0	Apr. 3	65.61
July	8	55.4	Aug. 14	60.16	Apr. 30	66.48
	22	53.3	Sept. 13	60.5	June 3	67.34
Aug.	6	55.8	Oct. 16	60.7		

a. Measurement by Geological Survey.

4/3-6D2 (U-43a). W. J. Smithson, formerly Phillips. Depth about 100 feet. Altitude is about 2,870 feet. Records available: 1949-57. Records furnished: 1949-53, GS; and 1954-57, F.

	Date	Water level		Date	Water level		Date	Water level
	June 16, 1949	57.6		Sept. 13, 1950	60.0		Jan. 15, 1953	57.05
	July 13	57.1		Oct. 16	60.1		Feb. 16	57.65
	Sept. 14	58.5		Dec. 15	59.2		Mar. 16	57.30
	Oct. 18	58.7		Jan. 15, 1951	58.5		Apr. 13	58.16
	Dec. 13	57.8		Feb. 13	58.3		Mar. 29, 1954	60.40
	Jan. 23, 1950	57.0		Mar. 19	58.1		May 12	69.70
	Feb. 15	56.6		Apr. 17	59.1		Nov. 16	61.80
	Mar. 14	55.2		Aug. 13	61.91		Apr. 12, 1955	61.03
	Apr. 18	57.2		June 11, 1952	58.14		Dec. 9	64.82
	June 14	58.8		July 14	59.58		Dec. 2, 1956	65.29
	July 14	59.2		Aug. 19	59.3		Apr. 30, 1957	64.66
	Aug. 14	59.53		Sept. 15	60.85			

4/3-18E1 (U-28). Owner unknown, formerly C. O. Evans. Depth unknown. Altitude is 2,866.58 feet. Records available: 1930-32, 1935, 1938-57. Records from Geological Survey Water-Supply Papers or from F, except as indicated.

Jan.	18, 1930	28.85	Nov.	12, 1941	21.55	Oct.	16, 1946	b22.8
Jan.	28, 1931	28.48	May	6, 1942	22.61		22	23.6
Feb.	12	28.25	Nov.	20	25.12		29	b23.1
	20	28.32	May	12, 1943	14.48	Nov.	5	b23.2
May	1	29.30	Dec.	20	22.80		19	b23.0
July	28	30.38	Apr.	20, 1944	15.27	Nov.	26	b20.1
Oct.	8	30.84	Dec.	14	16.03	Dec.	5	b19.0
Jan.	15, 1932	30.48	May	2, 1945	14.36		16	b18.5
Feb.	19	26.00	Nov.	21	21.71	Jan.	6, 1947	b17.0
Mar.	25	21.60	Apr.	24, 1946	17.02		21	b16.6
May	5	20.84	July	29	b21.5	Feb.	3	b16.4
Sept.	13	24.01	Aug.	6	b21.8		19	b15.9
Apr.	18, 1935	21.50		20	b22.2	Mar.	4	b15.9
May	8	20.14		28	b22.7		19	b16.5
	22	20.70	Sept.	5	b21.9	Apr.	8	b17.3
Oct.	29, 1938	22.12	Sept.	12	b22.1	Apr.	29	b18.2
June	7, 1939	20.05		19	b22.3	May	13	b18.7
Nov.	24	24.24		26	b22.5		15	18.8
Nov.	20, 1940	25.46	Oct.	2	b22.6		26	b19.1
June	17, 1941	15.25		9	b22.7	June	9	b19.7

Continued

b. Record from U. S. Bureau of Reclamation.

4/3-18E1 (U-28).--Continued.

Date	Water level	Date	Water level	Date	Water level
June 24, 1947	b20.2	Nov. 14, 1949	31.43	June 11, 1952	24.38
July 8	b21.6	Dec. 13	33.9	July 14	27.30
22	b22.3	Jan. 23, 1950	31.3	Aug. 19	26.80
Aug. 6	b22.9	Feb. 15	31.3	Sept. 15	33.60
Sept. 3	22.8	Mar. 14	32.0	Oct. 15	34.0
Oct. 9	23.5	Apr. 18	32.68	Nov. 24	dry
Nov. 12	24.2	May 5	33.24	Dec. 15	32.85
Dec. 8	24.5	June 14	34.0	Jan. 15, 1953	32.11
Jan. 7, 1948	24.9	July 14	34.8	Feb. 16	33.32
Feb. 16	25.4	Sept. 13	35.8	Mar. 16	33.50
Mar. 10	25.8	Oct. 16	35.8	Apr. 13	37.20
Apr. 14	26.65	Nov. 3	34.6	May 26	36.55
May 6	26.73	Dec. 15	35.6	Nov. 6	38.80
June 14	27.6	Jan. 15, 1951	35.1	May 11, 1954	31.90
July 13	29.0	Feb. 13	35.9	Nov. 16	37.65
Aug. 10	29.5	Mar. 19	36.5	Apr. 12, 1955	40.14
Sept. 14	29.4	May 3	dry?	Dec. 8	42.50
Oct. 13	30.0	June 13	37.98	Mar. 29, 1956	42.78
Dec. 1	29.9	July 16	39.00	Apr. 5	42.78
9	29.9	Aug. 13	39.36	Nov. 5	45.14
Feb. 17, 1949	30.3	Sept. 10	41.00	Dec. 5	45.28
Mar. 16	30.4	Oct. 15	39.75	Jan. 2, 1957	45.24
Apr. 13	29.5	Nov. 26	dry	Feb. 6	44.98
May 10	27.34	Dec. 12	39.80	Mar. 6	45.68
June 16	28.9	Jan. 21, 1952	35.89	Apr. 3	45.35
July 13	32.0	Feb. 11	33.79	Apr. 30	45.62
Aug. 17	30.6	Mar. 12	31.32	June 3	45.76
Sept. 14	31.5	Apr. 9	26.29	Nov. 5	a47.18
Oct. 18	31.43	May 28	23.10		

4/3-19R1 (U-13). Owner unknown, formerly Arrowhead Reservoir and Power Co. Depth unknown. Altitude is about 2,885 feet. Records available: 1905, 1907, 1930-56. Records furnished by F.

Jan. 15, 1953	35.88	Apr. 13, 1953	40.32	Mar. 29, 1956	Well destroyed
Feb. 16	37.70	Apr. 12, 1955	43.80		
Mar. 16	37.00	Dec. 8	39.50		

a. Measurement by Geological Survey.

b. Record from U. S. Bureau of Reclamation.

4/4-25N1 (F-26G1). Hesperia Water Co., formerly Tatum Brothers No. 3. Depth about 516 feet. Altitude is about 3,040 feet. Records available: 1952-57.

Date	Water level	Date	Water level	Date	Water level
Sept. 15, 1952	a189.7	Apr. 13, 1953	a193.07	Apr. 5, 1956	a198.40
Dec. 15	a192.3	May 11, 1954	c208.7	Dec. 18	c202.35
Jan. 15, 1953	a192.12	Nov. 16	c197.30	Mar. 14, 1957	a202.89
Feb. 16	a193.28	Dec. 8, 1955	c199.10	Apr. 30	c201.73

4/4-26Q1 (F-26M1). Hesperia Water Co., formerly Tatum Brothers No. 5. Depth about 385 feet. Altitude is about 3,105 feet. Records available: 1952-57.

Sept. 15, 1952	a250.9	Apr. 13, 1953	a266.4	Dec. 8, 1955	c274.2
Dec. 15	a262.3	Nov. 6	c263.6	Dec. 18, 1956	c270.1
Jan. 15, 1953	a262.4	May 11, 1954	c275.8	Mar. 14, 1957	a294.39
Feb. 16	a272.5	Nov. 16	c266.1	Apr. 30	c269.4
Mar. 16	a262.8	Apr. 12, 1955	c270.5		

4/4-28E1 (F-26C1). Hesperia Water Co., formerly Tatum Brothers No. 6. Depth is about 709 feet. Altitude is about 3,280 feet. Records available: 1949-50, 1952-53, 1957.

March --, 1949	b431	Dec. 15, 1952	a439	Mar. 16, 1953	c429
Nov. --, 1950	c430	Jan. 15, 1953	a439	Mar. 13, 1957	a451.12
Sept. 15, 1952	a438	Feb. 16	c440		

5/3-3E1 (F-3D1, BR-31). R. Lewis. Depth unknown. Altitude is 2,914.2 feet. Records available: 1948-49, 1951-57.

Dec. 8, 1955	c85.20	Dec. 18, 1956	c86.86	Apr. 30, 1957	c89.64
Apr. 5, 1956	a87.99	Apr. 17, 1957	a88.63		

- a. Measurement by Geological Survey.
- b. Record from U. S. Bureau of Reclamation.
- c. Record from San Bernardino County Flood Control District.

5/3-9-1 (F-9K1, U-55, CDE-131). F. A. Fletcher. Depth about 458 feet. Altitude is 2,910.0 feet. R-cards available: 1917, 1930-33, 1935, 1937-49. R-cards furnished: 1946-47, BR; and 1948-49, GS.

	Water level		Water level		Water level
Date		Date		Date	
July 29, 1946	88.8	Dec. 5, 1946	88.8	Sept. 3, 1947	88.7
Aug. 6	88.7	16	88.7	Oct. 9	88.8
20	88.0	Jan. 21, 1947	88.8	Nov. 11	88.6
28	88.7	Feb. 3	88.7	Dec. 8	88.8
Sept. 5	88.8	19	88.8	Feb. 16, 1948	88.8
Sept. 12	88.9	Mar. 4	88.8	Mar. 10	88.9
19	88.8	19	88.8	Apr. 14	88.9
26	88.8	Apr. 8	88.8	June 14	89.0
Oct. 2	88.8	29	88.7	July 13	92.3
9	88.8	May 13	88.8	Aug. 10	100.5
Oct. 16	88.8	May 26	88.7	Sept. 14	89.0
22	88.8	June 9	88.7	Oct. 13	89.0
29	88.8	24	88.7	Nov. 19	88.7
Nov. 5	88.7	July 8.	88.8	Dec. 9	89.1
19	88.8	22	88.8	Feb. 17, 1949	90.7
26	88.8	Aug. 6	88.7	Mar. 6	Well destroyed

5/3-13M1. Owner unknown, formerly Eva V. Case. Depth unknown. Altitude is about 2,930 feet. Records available: 1948-57.

July 14, 1948 a89.30	Apr. 5, 1956 a91.60	Apr. 30, 1957 c92.56
Apr. 12, 1955 c91.20	Dec. 18 c92.20	
Dec. 8 c91.45	Apr. 24, 1957 a92.51	

5/3-18F1 (U-57, CDE-123). Apple Valley Ranchos Water Co., formerly J. D. Humiston. Depth about 464 feet. Altitude is 2,908.0 feet. Records available: 1917, 1923, 1930-33, 1935, 1937-53, 1955-57.

Jan. 16, 1953 a115.11	Apr. 5, 1956 a117.30	Mar. 6, 1957 c122.18
Feb. 17 a115.89	Nov. 5 c127.4	Apr. 3 c121.60
Mar. 17 a115.73	Dec. 5 c120.9	Apr. 30 a123.69
Dec. 18, 1955 c119.18	Feb. 6, 1957 c120.5	June 3 c125.50

5/3-22A1 (BR-32). R. Werner, formerly Curtis Marshall, formerly Rothwell. Depth about 267 feet. Altitude is 2,923.6 feet. Records available: 1948-57.

Jan. 14, 1948 a88.67	Nov. 7, 1950 b90.55	Nov. 16, 1954 c102.40
May 7 a88.87	May 4, 1951 a90.92	Dec. 8, 1955 c95.70
Nov. 19 a89.18	May 29, 1952 a92.09	Apr. 5, 1956 a95.60
May 11, 1949 a89.61	Nov. 24 a91.87	May 1, 1957 a113.76
Nov. 15 a89.65	Nov. 6, 1953 c98.40	Nov. 5 a97.96
May 4, 1950 a90.18		

a. Measurement by Geological Survey.

b. Record from U. S. Bureau of Reclamation.

c. Record from San Bernardino County Flood Control District.

5/3-24N1 (BR-33). R. Douglas. Depth unknown. Altitude is 2,927.7 feet. Records available: 1943-57.

Date	Water level	Date	Water level	Date	Water level
Jan. 24, 1948	a89.04	Dec. 8, 1955	c102.30	Apr. 31, 1957	c97.90
Nov. 7, 1950	b90.5	Apr. 5, 1956	a104.70	May 3	a96.63
Apr. 12, 1955	a99.80	Dec. 18	c96.85		

5/3-32H1 (BR-35, CDE-101). Newton Bass, formerly Abbots, formerly Smith. Depth about 269 feet. Altitude is 2,986.8 feet. Records available: 1917, 1950, 1954-57.

Nov. 14, 1950	b162.9	Apr. 12, 1955	c186.90	Dec. 18, 1956	c171.05
May 11, 1954	c198.00	Dec. 8	c183.10	Apr. 30, 1957	c171.43
Nov. 16	c187.52	Apr. 5, 1956	a168.50		

5/3-35N1 (BR-34). J. Cotner. Depth unknown. Altitude is 2,984.0 feet. Records available: 1950, 1953-57. Records from F except as indicated.

Nov. 8, 1950	147.7	Apr. 13, 1955	158.85	Nov. 9, 1956	a156.92
Nov. 9, 1953	158.66	Dec. 9	155.00	Dec. 18	157.45
May 12, 1954	158.60	Apr. 10, 1956	155.51	May 1, 1957	157.62
Nov. 16	158.20				

5/4-10M1 (U-61). Troxell and Munn. Depth 52.8 feet. Altitude is 2,767.6 feet. Records available: 1930-32, 1935, 1937-45, 1947-57. Records from F except as indicated.

Apr. 12, 1955	52.32	Dec. 18, 1956	44.30	Apr. 30, 1957	46.49
Dec. 8	dry	Apr. 4, 1957	a44.97		

- a. Measurement by Geological Survey.
- b. Record from U. S. Bureau of Reclamation.
- c. Record from San Bernardino County Flood Control District.

5/4-1131 (U-52). A. Pratt, formerly Lee Saul. Depth about 65 feet. Altitude is 2,788.3 feet. Records available: 1931-32, 1935-57. Records from Geological Survey Water-Supply Papers, except as indicated.

	Water level		Water level		Water level
Date		Date		Date	
Jan. 30, 1931	d53.80	Nov. 12, 1941	53.88	May 4, 1950	55.82
Feb. 14	53.20	May 6, 1942	54.54	Nov. 7	55.80
May 14	53.25	Nov. 19	54.57	May 4, 1951	55.67
July 28	53.50	May 13, 1943	54.24	Nov. 27	56.04
Nov. 12	53.30	Dec. 21	55.25	May 29, 1952	55.54
Mar. 22, 1932	52.69	Apr. 20, 1944	54.12	Nov. 25	56.0
June 15	52.62	Dec. 13	53.77	May 27, 1953	55.95
May 8, 1935	52.85	May 3, 1945	53.88	Nov. 9	58.00
Nov. 16, 1937	52.65	Nov. 20	53.89	May 11, 1954	62.40
June 7, 1938	53.80	Apr. 25, 1946	53.85	Nov. 16	60.40
Oct. 27	54.05	Jan. 5, 1947	53.8	Apr. 12, 1955	55.26
June 20, 1939	54.13	May 15	54.1	Apr. 5, 1956	a56.78
Nov. 24	54.00	Nov. 12	54.2	Dec. 18	c56.65
May 8, 1940	54.24	May 7, 1948	54.09	Apr. 5, 1957	a56.73
Nov. 20	54.28	Dec. 2	54.14	30	c58.14
June 17, 1941	53.80	Nov. 14, 1949	55.62	Nov. 5	a57.30

5/4-35A1 (U-68, CDE-47). Kalin Co., formerly A. Sorenson, Veder Ranch. Depth about 895 feet. Altitude 2,799.1 feet. Records available: 1917, 1930-31, 1945, 1948-57.

Apr. 12, 1917 Flowing ^{d/}	Apr. 12, 1955 c2.00	Dec. 18, 1956 c6.08
May 15, 1931 Flowing ^{a/}	Apr. 5, 1956 a7.32	Apr. 30, 1957 c10.90

5/4-36NL (U-72, CDE-52). Kalin Co. Depth about 306 feet. Altitude is about 2,827 feet. Records available: 1917, 1930-32, 1934-45, 1947-50, 1953, 1955-57. Records from Geological Survey Water-Supply Papers except as indicated.

Apr. 12, 1917	4.0	May 17, 1934	6.7	May 12, 1943	2.49
Feb. 1, 1930	6.1	May 22, 1935	5.3	Jan. 7, 1944	3.90
Apr. 3	6.4	Nov. 29	6.5	Apr. 20	4.02
Jan. 28, 1931	8.2	Mar. 19, 1936	6.0	Dec. 14	4.02
Feb. 14	8.2	June 3	6.4	Apr. 26, 1945	4.31
Feb. 20	8.1	June 29, 1937	4.4	Jan. 6, 1947	c4.36
May 2	9.2	Dec. 3	4.3	Dec. 1, 1948	c10.15
Aug. 4	8.4	Oct. 27, 1938	3.5	Nov. 14, 1949	c 8.54
Oct. 8	8.3	June 8, 1939	3.7	Nov. 7, 1950	c12.66
Nov. 12	7.8	Nov. 25	3.9	Nov. 9, 1953	c19.04
Jan. 7, 1932	7.2	May 3, 1940	3.0	Dec. 9, 1955	c19.54
Feb. 24	5.6	Nov. 20	4.2	Apr. 5, 1956	a19.75
Apr. 29	5.8	June 10, 1941	2.6	Dec. 18	c19.37
Sept. 13	7.6	Nov. 12	2.7	Apr. 30, 1957	c23.76
May 24	5.1	May 7, 1942	3.5	Nov. 5	a21.15
Dec. 21	6.0	Nov. 21	4.0		

a. Measurement by Geological Survey.

c. Record from San Bernardino County Flood Control District.

b. Report from California Department of Engineering (1918).

5/5-4C1 (F6/5-33L1) McCurdy. Depth is 150.3 feet. Altitude is about 2,940 feet. Records available: 1948-57. Records furnished: 1948-July 1, 1953, GS; July 1, 1953-57, F, except as indicated.

Date	Water level	Date	Water level	Date	Water level
May 4, 1948	120.5	Nov. 26, 1951	124.2	Apr. 11, 1955	125.95
Nov. 23	121.1	May 13, 1952	125.0	Dec. 5	126.00
May 25, 1949	121.1	Nov. 28	124.8	Apr. 3, 1956	125.93
Jan. 11, 1950	121.8	May 22, 1953	124.80	Dec. 17	126.40
May 8	121.9	Nov. 5	127.1	Apr. 9, 1957	a126.40
Nov. 16	122.6	May 10, 1954	124.80	Apr. 29	126.47
May 15, 1951	123.33	Nov. 15	125.94	Nov. 6	a126.88

5/5-22E1 (F-22N1, CDE-185). J. Harris. Depth is about 340 feet. Altitude is 3,121.0 feet. Records available: 1918, 1947-57. Records furnished: 1918-52, GS; 1953-57, F, except as indicated.

1918?	d297.5	May 15, 1951	301.83	Dec. 5, 1955	312.24
Nov. 3, 1947	299.8	Nov. 26	302.8	Apr. 3, 1956	309.30
May 5, 1948	299.7	May 13, 1952	302.8	Dec. 17	303.65
Nov. 23	300.9	Nov. 28	296.9	Feb. 19, 1957	a313.25
May 2, 1949	301.6	Nov. 5, 1953	298.55	Apr. 29, 1957	c305.33
Jan. 11, 1950	303.4	May 10, 1954	307.0	Nov. 6	a312.54
May 8	301.1	Apr. 11, 1955	303.75		

6/2-34M1 (F-33X1). Oldenberg. Depth 344.0 feet. Altitude is about 3,240 feet. Records available: 1954-57. Records furnished by F, except as indicated.

Nov. 16, 1954	212.65	Dec. 8, 1955	195.00	Jan. 17, 1957	a177.19
Apr. 12, 1955	209.20	Apr. 5, 1956	184.60	Apr. 30	177.59
Dec. 8	195.00	Dec. 18	176.65		

6/3-9D1. Sarah A. Guess. Depth is about 70 feet. Altitude is about 3,115 feet. Records available: 1953, 1955-57. Records furnished by F, except as indicated.

Feb. 17, 1953	a52.00	Apr. 13, 1955	46.75	Feb. 20, 1957	a41.65
Mar. 17	a54.44	Dec. 9	40.77	May 1	40.83
Apr. 14	a54.05	Apr. 10, 1956	40.62		
Nov. 10	42.20	Dec. 20	40.92		

6/3-9D2. Hattie E. Woods. Depth is about 70 feet. Altitude is about 3,090 feet. Records available: 1953-57. Records furnished by F, except as indicated.

Feb. 17, 1953	a37.50	Nov. 17, 1954	38.85	Dec. 20, 1956	39.00
Mar. 18	a38.78	Apr. 13, 1955	38.64	Feb. 21, 1957	a38.91
Nov. 10	39.55	Dec. 9	38.95		
May 12, 1954	39.10	Apr. 10, 1956	38.81		

a. Measurement by Geological Survey.

c. Record from San Bernardino County Flood Control District.

d. Record from California Department of Engineering (1918).

159
Table 5

6/3-9E2 (F-091). Samuel C. Guess. Depth 49.6 feet. Altitude is about 3,095 feet. Records available: 1953-57. Records furnished by F, except as indicated.

Date	Water level	Date	Water level	Date	Water level
Feb. 17, 1953	a42.15	May 12, 1954	53.00	Apr. 10, 1956	51.60
Mar. 17	a40.65	Nov. 17	52.55	Dec. 20	51.67
Apr. 17	a40.65	Apr. 13, 1955	67.41	Feb. 21, 1957	a40.86
Nov. 10	51.80	Dec. 9	52.28	May 1	51.52

6/3-9E4 (F-9E1, BR-28, DGT-338). C. D. Gazile, formerly J. P. Whitby. Depth about 48 feet. Altitude is about 3,085 feet. Records available: 1918, 1950, 1953-57.

Oct. 27, 1950	b30.6	Nov. 10, 1953	c31.20	Apr. 10, 1956	c30.10
Feb. 17, 1953	a30.06	Nov. 17, 1954	c30.18	Dec. 20	c31.05
Mar. 17	a30.66	Apr. 13, 1955	c30.01	Feb. 27, 1957	a30.36
Apr. 14	a30.76	Dec. 9	c30.61	May 1	c30.48

6/3-17B1 (DGT-340). Melba Armstrong. Depth 87.1 feet. Altitude is about 3,050 feet. Records available: 1917, 1953-57.

Nov. 10, 1953	c71.20	Apr. 13, 1955	c72.69	Dec. 20, 1956	c71.60
May 12, 1954	c74.10	Dec. 9	c72.20	Mar. 1, 1957	a71.11
Nov. 17	c73.38	Apr. 10, 1956	c71.60	May 1	c70.96

6/3-28R1 (BR-30, CDE-146). Irene McCarthy, formerly Byron Buneman. Depth about 172 feet. Altitude is about 2,970 feet. Records available: 1917, 1946, 1948-54, 1956-57. Measurements by GS, except as indicated.

Apr. 25, 1946	125.35	May 5, 1950	126.80	Nov. 16, 1954	c135.00
Jan. 14, 1948	125.60	Nov. 7	b127.25	Apr. 5, 1956	137.90
May 13	125.70	Nov. 27, 1951	128.39	Dec. 18	c140.45
Nov. 19	125.81	Dec. 4, 1952	130.47	Apr. 30, 1957	c141.74
May 11, 1949	126.00	May 23, 1953	131.37	May 15	142.04
Nov. 15	126.39	27	131.37	Nov. 5	145.38

6/6-14P1 (CDE-292). M. Rothenberg. Depth unknown. Altitude is 2,833.0 feet. Records available: 1918, 1947-57. Measurements by GS, except as indicated.

Nov. 13, 1947	43.2	Nov. 27, 1951	48.0	Apr. 11, 1955	c44.58
Nov. 23, 1948	44.34	May 13, 1952	46.8	Apr. 3, 1956	c44.40
May 25, 1949	46.0	Nov. 28	44.15	Jun. 16, 1957	44.42
Jan. 15, 1950	48.0	May 22, 1953	45.30	Apr. 29	c44.30
May 8	45.70	May 10, 1954	c45.90		
May 15, 1951	45.59	Nov. 15	c45.70		

a. Measurement by Geological Survey.

b. Record from Bureau of Reclamation.

c. Record from San Bernardino County Flood Control District.

6/6-14R1 (CDE-316). Owner unknown. Depth 46.1 feet. Altitude is about 2,621 feet. Records available: 1917, 1947-57. Measurements by GS except as indicated.

Date	Water level	Date	Water level	Date	Water level
1917	d40.0	Nov. 16, 1950	41.5	Nov. 15, 1954	c41.50
Oct. 23, 1947	41.3	May 15, 1951	41.35	Apr. 11, 1955	c41.48
May 5, 1948	41.3	27	41.4	Dec. 5	c41.20
Nov. 23	41.3	May 13, 1952	41.4	Apr. 3, 1956	c41.44
May 25, 1949	41.3	Nov. 28	41.10	Dec. 17	c41.04
Jan. 11, 1950	41.6	May 22, 1953	41.38	Feb. 19, 1957	41.28
May 8	41.4	May 10, 1954	c41.50	Apr. 29	c41.00
				Nov. 6	41.43

6/6-18Q2 (F-18P1). Owner unknown. Depth 72.6 feet. Altitude is about 2,895 feet. Records available: 1947-57. Measurements by GS except as indicated.

Nov. 4, 1947	51.8	May 15, 1951	49.8	Nov. 15, 1954	c50.10
May 5, 1948	49.9	Nov. 27	49.8	Apr. 11, 1955	c50.00
Nov. 23	49.7	May 13, 1952	50.2	Dec. 5	c50.00
May 26, 1949	49.64	Nov. 28	49.85	Apr. 3, 1956	c50.13
Jan. 11, 1950	49.6	May 22, 1953	50.30	Nov. 26	50.08
May 8	49.7	Nov. 5	c49.90	Dec. 17	c50.27
Nov. 16	49.5	May 10, 1954	c50.40	Apr. 29, 1957	c50.40

6/6-21A1. Owner unknown. Depth unknown. Altitude is about 2,860 feet. Records available: 1947-51, 1955-57. Measurements by GS except as indicated.

Nov. 4, 1947	59.6	May 8, 1950	64.5	Apr. 3, 1956	c60.44
May 5, 1948	55.1	May 15, 1951	63.7	Dec. 17	c60.19
Nov. 23	59.6	Nov. 27	63.3	Apr. 29, 1957	c61.10
May 26, 1949	62.3	Nov. 11, 1955	c64.9		
Jan. 11, 1950	63.4	Dec. 8	c65.5		

6/6-24H1 (F-24A1). Mrs. M. Powell, formerly Johnson. Depth about 85 feet. Altitude is about 2,830 feet. Records available: 1947-56. Measurements by GS except as indicated.

Nov. 3, 1947	68.3	May 13, 1952	78.8	Apr. 11, 1955	c71.20
May 5, 1948	68.8	Nov. 28	73.65	Dec. 5	c68.60
May 26, 1949	68.3	May 22, 1953	68.40	Apr. 3, 1956	70.23
Jan. 11, 1950	69.9	Nov. 5	c79.5	Dec. 17	c71.10
May 15, 1951	69.2	May 10, 1954	c76.60		
Nov. 27	69.8	Nov. 15	c75.60		

- c. Record from San Bernardino County Flood Control District.
d. Record from California Department of Engineering (1918).

6/6-26F1 (F-26F1, CDE-227). J. H. Webster, formerly J. W. Walker.
Depth about 115 feet. Altitude is 2,948.3 feet. Records available:
1917, 1947-49, 1954, 1956. Measurements by GS except as indicated.

Date	Water level	Date	Water level	Date	Water level
1917	d102.0	May 5, 1948	98.4	Apr. 10, 1954	c120.5
Nov. 14, 1947	98.4	May 26, 1949	98.7	Nov. 7, 1956	98.36

6/6-28H1 (CDE-228). L. M. Cotton. Depth about 150 feet. Altitude is 2,948.9 feet. Records available: 1918, 1952-57. Records furnished by F.

May 14, 1952	102.2	Nov. 15, 1954	102.50	Apr. 3, 1956	101.45
Nov. 28	104.75	Apr. 11, 1955	102.20	Dec. 17	102.30
Nov. 5, 1953	102.60	Dec. 5	102.10	Apr. 29, 1957	102.20

6/6-32K1 (F-32P1, CDE-226). F. Reink. Depth about 226 feet. Altitude is 3,047.8 feet. Records available: 1918, 1947, 1949-57. Measurements by GS except as indicated.

Feb. 20, 1918	d131.0	Nov. 27, 1951	156.7	Dec. 5, 1955	c167.10
Nov. 14, 1947	157.8	May 14, 1952	157.9	Apr. 3, 1956	c158.00
23	158.1	Nov. 29	159.75	Nov. 7	156.82
May 26, 1949	158.9	May 22, 1953	157.30	Dec. 17	c158.40
Jan. 11, 1950	165.3	Nov. 5	c163.35		
May 8	158.0	May 10, 1954	c166.40	Apr. 29, 1957	c164.20
Nov. 16	156.9	Nov. 15	c161.35	Nov. 6	157.60
May 15, 1951	156.4	Apr. 11, 1955	c161.25		

6/7-12N1 (CDE-300). Owner unknown. Depth 23.6 feet. Altitude is 2,867.0 feet. Records available: 1918, 1947-50, 1952-57. Measurements by GS except as indicated.

Feb. 21, 1918	d21.0	Nov. 16, 1950	21.6	Apr. 11, 1955	c20.00
Nov. 4, 1947	21.4	May 14, 1952	21.3	Dec. 5	c19.56
May 5, 1948	21.2	Nov. 28	24.53	Apr. 3, 1956	c19.57
Nov. 23	21.4	May 22, 1953	21.30	Aug. 29	20.33
May 26, 1949	21.0	Nov. 5	c21.10	Dec. 17	c21.14
Jan. 11, 1950	21.4	May 10, 1954	c20.25	Apr. 29, 1957	c20.98
May 8	21.5	Nov. 15	c19.70	Nov. 6	20.23

6/7-14Q1 (F-14R1). C. V. Pual. Depth is about 440 feet. Altitude is about 2,900 feet. Records available: 1950-57. Measurements by GS from 1950 until May 22, 1953, and by F from November 5, 1953, through 1957.

Nov. 16, 1950	63.5	May 22, 1953	54.00	Apr. 3, 1956	65.59
May 15, 1951	56.4	Nov. 5	65.50	Dec. 17	56.25
Nov. 27	55.0	Nov. 15, 1954	59.80	Apr. 29, 1957	67.35
May 1, 1952	55.3	Apr. 11, 1955	64.60		
Nov. 29	59.15	Dec. 5	59.94		

c. Record from San Bernardino County Flood Control District.

i. Record from California Department of Engineering (1918).

e. Pumping.

6/7-2.NE (CDE-218). J. Campbell. Depth is 126.9 feet. Altitude is about 3,010 feet. Records available: 1917, 1928, 1947-57. Measurements by GS except as indicated.

Date	Water level	Date	Water level	Date	Water level
Nov. 4, 1947	128.9	May 15, 1951	126.62	Apr. 11, 1955	c118.2
May 5, 1948	127.8	Nov. 27	127.7	Dec. 5	c118.0
Nov. 23	125.4	Nov. 28, 1952	126.85	Apr. 3, 1956	c120.2
May 26, 1949	129.2	Nov. 5, 1953	c127.90	Nov. 7	126.6
Jan. 11, 1950	126.0	Apr. 10, 1954	c131.61	Dec. 17	c118.4
May 8	126.7	Nov. 15	c119.10	Apr. 29, 1957	c118.2

6/7-26R1. H. L. Notterman. Depth unknown. Altitude is about 3,005 feet. Records available: 1950-57. Measurements by GS except as indicated.

Jan. 11, 1950	95.3	Nov. 28, 1952	105.8	Dec. 5, 1955	c105.8
May 8	97.7	May 22, 1953	105.7	Apr. 3, 1956	c105.9
Nov. 16	94.6	Nov. 5	c106.0	Nov. 7	106.0
May 15, 1951	96.0	May 10, 1954	c105.9	Dec. 17	c106.1
Nov. 27	96.7	Nov. 15	c105.1	Apr. 29, 1957	c105.9
May 14, 1952	106.0	Apr. 11, 1955	c106.00		

6/7-27N1 (CDE-217). H. M. Engebretson. Depth is about 150 feet. Altitude is about 3,020 feet. Records available: 1918, 1947-57. Measurements through May 22, 1953, and November 7, 1956, by GS; from November 5, 1953, through 1957 by F.

Nov. 4, 1947	134.5	May 15, 1951	134.6	Nov. 15, 1954	131.9
May 5, 1948	134.3	Nov. 27	134.8	Apr. 11, 1955	135.5
Nov. 23	134.6	May 14, 1952	135.9	Dec. 5	135.8
May 26, 1949	134.7	Nov. 28	134.8	Apr. 3, 1956	135.2
Jan. 11, 1950	134.2	May 27, 1953	134.9	Nov. 7	134.9
May 8	134.4	Nov. 5	135.6	Dec. 17	136.7
Nov. 16	134.3	Apr. 10, 1954	133.4	Apr. 29, 1957	135.1

c. Record from San Bernardino County Flood Control District.

Table 6.- Drillers' logs of water wells

Note: The term kaolin (also spelled koalin, kaoline, kalein, kalene, etc.) is used by some drillers in the Upper Mojave Valley area to describe a hard white calcareous clay commonly containing small solution channels that cause the material to be moderately water bearing.

3/3-6C2. Herbert Steel. Altitude about 2,940 feet. Drilled by F. D. McDougall in 1950. 8-inch casing, perforated 57 to 83 feet.

Material	Thickness (feet)	Depth (feet)
Brown sandy soil -----	3	3
Brown gravelly clay -----	14	17
Hard brown clay with rocks -----	4	21
Light sandy clay -----	7	28
Hard clay with boulders -----	3	31
Dry sand and small gravel -----	26	57
Fine water sand bearing some water -----	3	60
Coarse water sand and small gravel -----	4	64
Light sandy clay -----	7	71
Coarse water sand and gravel -----	14	85

3/3-6L1. R. Puppe. Altitude about 2,995 feet. Drilled by J. S. Gobar in 1953. 10-inch casing, perforated from 95 to 140 feet. Reported yield about 225 gpm with a 15-foot drawdown.

Decomposed granite and rocks -----	40	40
Large boulders -----	4	44
Decomposed granite and rocks -----	46	90
Very good water gravel (from pea gravel to 4-inch diameter) -----	60	150

3/4-1C3. N. Platt, formerly W. M. Angel. Altitude about 2,950 feet. Drilled by J. S. Gobar in 1923. 10-inch casing, not perforated.

Boulders and decomposed granite -----	20	20
Clay with some sand -----	27	47
River sand -----	16	63
Clay -----	4	67
Gravel -----	1	68

4/1-19C1. Arthur Rolapp. Altitude about 2,990 feet. Drilled by J. S. Gobar in 1948. 8-inch casing, perforated from 7 $\frac{1}{4}$ to 11 $\frac{1}{4}$ feet.

Material	Thickness (feet)	Depth (feet)	C. S.
Top soil	2	2	Top
Kaolin	20	22	Coars
Rocks	2	24	Fine
Hard cemented decomposed granite	12	36	Brown
Kaolin	8	44	sand
Cement	8	52	Loose
Rocks	14	66	Hard
Cement, water bearing	11	77	sand
Kaolin	8	85	Hard
Cemented rocks, water bearing	33	118	Cemen
Kaolin	8	126	Gray
Cemented gravel	6	132	Cemen
Red clay	6	138	Gray
Gray clay	6	144	and
Cement	1	155	Gray
Clay	43	188	Brown
Cement	4	192	Very
Clay	11	203	Brown

4/1-20R1. Opal M. Curry. Altitude about 3,185 feet. Drilled by F. D. McDougall in 1955. 8-inch casing, perforated from 236 to 296 feet.

Sandy loam	4	236
Loose sand and gravel, some rock	14	250
Rocky brown clay	3	253
Boulders and small rocks	3	256
Light brown clay with rocks and gravel	16	259
Boulders, clay and small rock	48	262
Small rock and hard brown clay	14	265
Boulders	2	268
Small rock, coarse sandy clay	33	271
Boulders and sandy clay	61	274
Large rock and boulders	9	278
Large boulders	7	280
Rocky brown sandy clay	46	283
Fine water-bearing sand	3	286
Rocky brown clay	20	289
Broken rock, gravel and sand	22	292

Drilled from 3 drawds
Sand a Shale Calich Sand a Shale Loose Shale Gravel Swelli Gravel Swelli Gravel Swelli Gravel Swelli Gravel Swelli

4/2-3Q1. C. H. Barnard. Altitude about 3,035 feet. Drilled by C. Steele in 1952. 10-inch casing, perforated from 168 to 220 feet.

Material	Thickness (feet)	Depth (feet)
Top soil -----	12	12
Coarse sand and gravel -----	30	42
Fine sand -----	9	51
Brown, hard, packed, clay; carrying sand and gravel -----	21	72
Loose gray clay and fine sand -----	10	82
Hard, packed, red clay; carrying sand and gravel -----	8	90
Hard packed gray clay -----	2	92
Cemented sand and gravel -----	10	102
Gray clay, sand, and gravel -----	14	116
Cemented ledge -----	3	119
Gray clay carrying kaolin, gravel and sand -----	9	128
Gray clay, soft and sticky -----	20	148
Brown clay, soft -----	6	154
Very hard brown clay -----	16	170
Brown sandstone, some clay -----	2	172
Water-bearing sand and gravel -----	14	186
Very hard ledge of clay -----	4	190
Water-bearing coarse gravel, some sand -----	26	216
Crushed rock -----	6	222

4/2-4Q1. Bernice and A. Mendel, Jr. Altitude about 3,080 feet. Drilled by Scoggins Drilling Co. in 1953. 16-inch casing, perforated from 300 to 500 feet. Reported yield about 720 gpm with a 310-foot drawdown.

Sand and gravel -----	12	12
Shale -----	8	20
Caliche -----	10	30
Sand and gravel -----	15	45
Shale -----	10	55
Loose gravel -----	45	100
Shale -----	20	120
Gravel and sand -----	15	135
Swelling shale -----	105	240
Gravel -----	10	250
Swelling? shale -----	20	270
Gravel and water -----	45	315
Swelling? shale -----	25	240
Gravel -----	65	405
Swelling? shale -----	25	430
Gravel -----	70	500
Swelling? shale -----	5	505

4/2-5H1. Paul D. Martin. Altitude about 3,050 feet. Drilled in 1948. 10-inch casing, 0-255 feet, perforated interval unknown, 78 feet of perforated casing.

Material	Thickness (feet)	Depth (feet)
Decomposed granite, hard -----	12	12
Gravel -----	15	27
Loose caving decomposed gravel -----	15	42
Decomposed gravel -----	30	72
Hard decomposed gravel -----	20	92
Sandy clay -----	18	110
Hard cement -----	6	116
Decomposed gravel -----	26	142
Clay, gray -----	14	156
Sandstone -----	4	160
Clay with kaolin -----	28	188
Good water -----	17	205
Clay, gray -----	22	227
Sandy clay -----	13	240
Cement -----	5	245
Sand, dirty -----	10	255

4/2-9E1. C. S. Parker. Altitude about 3,110 feet. Drilled by F. D. McDougall in 1948. 12-inch casing; perforated from 270-300 feet.

Coarse sandy clay -----	33	33
No entry -----	3	36
Coarse sandy clay -----	12	48
Coarse dry sand -----	9	57
Coarse sandy clay -----	7	67
Clay -----	3	92
Coarse sandy clay -----	25	100
Hard clay -----	8	138
Light sandy clay and decomposed granite -----	38	138
Coarse sandy clay carrying a little water -----	4	142
Light sandy clay and decomposed granite, sand is coarse -----	28	170
Hard clay -----	8	178
Sandy clay -----	16	194
Hard clay -----	5	199
Sandy clay -----	7	205
Hard clay -----	12	212
Sandy clay -----	8	218
Silt (little water) -----	40	266
Sand (coarse), water -----	38	304
Light clay -----	6	310

2,980
1945.
casin

Soil
Blue
Water
Blue
Water
Adobe
Hard
Adobe
Blue

C. C.

Wash
Brown
Wash
Cement
Heavy
Sandy
Rocks
Rock
Cement
Water

4
deeper
248 fe

No ent
Sand,
Clay -
Sand,
Clay -

illed in
1, 78 feetDepth
(feet)

4/2-13A1. Francis Hill, formerly F. Thompson. Altitude about 2,980 feet. Originally drilled by C. Steele to 138 feet in about 1945. Reportedly deepened to 225 feet at a later date. 12-inch casing,

Material	Thickness (feet)	Depth (feet)
Soil formation -----	64	64
Blue clay -----	4	68
Water gravel -----	18	86
Blue clay -----	3	89
Water gravel -----	2 $\frac{1}{2}$	91 $\frac{1}{2}$
Adobe and clay -----	40 $\frac{1}{2}$	132
Hard kaliene -----	3	135
Adobe clay -----	3	138
Blue clay -----	87	225

illed by
-300 feet.

4/2-20D1. J. A. Miller. Altitude about 3,340 feet. Drilled by C. C. Lackyard in 1948. 6-inch casing, perforated from 135 to 180 feet.

Wash gravel, same as surface -----	49	49
Brown clay -----	9	58
Wash gravel -----	47	105
Cemented conglomerate -----	41	146
Heavy wash gravel and boulder -----	19	165
Sandy clay -----	27	192
Rocks and gravel -----	2	194
Rock (boulder) -----	10	204
Cemented conglomerate -----	10	214
Water in rock formation -----	21	235

4/3-2B2. Ralph Beasley. Altitude is 2,995.6 feet. Existing well deepened by David Engel in 1956. 8-inch casing, perforated from 179 to 248 feet.

No entry -----	160	160
Sand, water bearing -----	30	190
Clay -----	20	210
Sand, water bearing -----	38	248
Clay -----	1	249

1/1-4-2. Morgan Ranch. Drilled by Albert Crooks.

Material	Thickness (feet)	Depth (feet)
Alluvium, decomposed granite, quicksand with streaks of yellow -----	160	160
Arkosic water sand of medium grain size -----	13	173
Water sand and gravel, compact -----	9	182
Compact sand with streaks of yellow -----	31	213
Hard sand shell -----	9	222
Compact arkosic sand with streaks of yellow clay -----	8	230
Compact sand and interbedded clay -----	95	325
Sandy clay and gravel -----	27	352
Water sand -----	28	380
Sandy clay, streak of water -----	28	408
Water-bearing sand -----	4	412
Gravel and sand -----	6	418
Gray sand and clay, sticky -----	9	427
Sand, caving -----	13	440
Gray clay, sandy -----	16	456
Green streaks of clay, hard sand -----	29	485
Sandy clay, water, gravel -----	18	503
Yellow clay -----	22	525
Compact sand and gravel -----	23	548
Loose sand and gravel -----	12	560
Clay and sand, streaks of shale -----	34	594
Sand, caving -----	16	610
Sand and clay -----	15	625
Shale, gray streaks of sand -----	265	890
Hard lime shale -----	150	1,040
Shale with streaks of sand -----	75	1,115
Lime and sand streaks -----	57	1,172
Brown shale streaks and lime -----	28	1,200
Hard lenses of lime, clay and sand -----	18	1,218
Hard sand -----	18	1,236
Gray shale and hard streaks -----	32	1,268
Sand, hard streaks -----	9	1,277

1/3-5A2. Effie D. Sanden. Altitude about 3,000 feet. Drilled by J. S. Gobar in 1953. 10-inch casing, perforated from 238 to 268 feet.

Top soil, sandy -----	1	1
Hard pan -----	4	5
Cemented gravel -----	17	22
Caving sand -----	6	28
Yellow sandy clay -----	12	40
Brown sandy clay -----	140	180
Cemented sand -----	4	184
Quicksand -----	20	204
Pea-size gravel to sand -----	18	222
Sandy clay -----	16	238
Coarse gravel, some egg size -----	30	268
Sandy clay -----	32	300

Depth
(feet)

4/3-5A3. C. C. Koon. Altitude about 3,000 feet. Drilled by J. S. Gobar in 1953. 10-inch casing, perforated 210 to 225 feet and 222 to 252 feet. Reported yield about 351 gpm with a 32-foot drawdown.

Material	Thickness (feet)	Depth (feet)
Hardpan -----	2	2
Kaolin -----	1	3
Sand -----	5	8
Hardpan -----	4	12
Sandy clay -----	23	35
Blow sand -----	25	60
Cement -----	4	64
Decomposed granite and clay -----	16	80
Sandy clay -----	36	116
Sand -----	8	124
Decomposed granite -----	12	136
Sandy clay -----	34	170
Cement -----	4	174
Sandstone -----	9	183
Water gravel, some pea size, mostly sand -----	41	224
Decomposed granite -----	8	232
Gravel, pea size, some walnut size -----	20	252
Sandy clay -----	38	290
Decomposed granite -----	4	294
Packed sand -----	4	298
Decomposed granite -----	2	300

4/3-5D2. Florence Hopper. Altitude about 2,960 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 150 to 190 feet.

Sand clay	48	48
Sand hard	4	52
Sandy clay	6	58
Sand	11	69
Gravel	9	78
Clay	19	97
Clay sand	64	161
Sand, water	11	172
Clay	2	174
Sand, water	16	190
Clay	1	191

grilled by
68 feet.

1

5

22

28

160

180

184
201

200
200

222
22A

250

268

100

4/3-5D5. Westley Thilake. Altitude about 2,920 feet. Drilled by D. Engel in 1956. 8-inch casing, perforated 114? to 169 feet.

Material	Thickness (feet)	Depth (feet)
Sandy clay -----	8	8
Sand -----	2	10
Sand and clay -----	6	16
Sand -----	11	27
Sand and clay -----	68	95
Sand and gravel -----	16	111
Sand, water -----	10	121
Clay -----	1	122
Sand, water -----	14	136
Clay -----	16	152
Gravel, water -----	16	168
Clay -----	1	169

4/3-5Q2. Robert Pollard. Altitude about 3,005 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 188 to 228 feet.

Sandy gravel -----	59	59
Sandy clay -----	130	189
Sand, water -----	10	199
Clay -----	2	201
Sand, water -----	6	207
Clay -----	2	209
Sand, water -----	19	228
Clay -----	1	229

4/3-5Q3. Robert McCling. Altitude about 2,985 feet. Drilled by David Engel in 1955. 8-inch casing, perforated from 48 to 210 feet.

Sand -----	4	4
Clay -----	6	10
Sand -----	54	61
Clay -----	3	67
Sand -----	73	110
Hard sand -----	10	150
Sand -----	18	168
Clay -----	4	172
Sand, water -----	26	198
Clay -----	1	199
Sand -----	11	210
Clay -----	1	211

led by
depth
(feet)
8
10
16
27
95
111
121
122
136
152
168
169

4/3-6A1. New Way Laundry, formerly A. J. Lintner. Altitude 2,871.91 feet. Drilled by J. S. Gobar in 1922, deepened in 1954. Was 6-inch casing, now 12-inch, perforated from 75 to 99 feet.

	Material	Thickness (feet)	Depth (feet)
Sand		2	2
Hardpan		18	20
Sand		20	40
Quicksand		8	48
Sand		18	66
Clay with gravel and quicksand		12	78
Sand		12	90
Boulders		5	95
Gravel		4	99

ed by
sheet.
59
189
199
201
207
209
228
229

4/3-6D2. W. J. Smithson. Altitude about 2,870 feet. Drilled by F. D. McDougall in 1948. 8-inch casing, 0-100 feet, perforated interval unknown, 27 feet of perforated casing installed.

Surface material		4	4
Top soil		4	8
Hard dry sand		17	25
Coarse sandy clay		2	27
Red clay		37	64
Coarse sand and clay		3	67
Coarse sand and water gravel		31.5	98.5
Red clay		1.5	100

d by
t.
4
10
64
67
140
150
168
172
198
199
210
211

4/3-6H1. H. W. Fredenburg. Altitude about 2,880 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 59 to 99 feet.

Top soil		4	4
Hardpan		4	8
Sand		14	22
Hardpan		16	38
Sand		22	60
Clay		2	62
Sand		8	70
Clay		3	73
Sand, water		22	95
Clay		4	99

4/3-6J2. A. J. Crawford, formerly L. A. Sauers. Altitude about 2,200 feet. Drilled by L. F. McFadden in 1950. 9-inch casing. Yielded 50 gpm with 12-foot drawdown. Water temperature 62°F.

Material	Thickness (feet)	Depth (feet)
No entry -----	1	1
Top soil -----	6	7
No entry -----	2	9
Slag sand -----	26	35
Sand and clay -----	35	70
Hard clay -----	4	74
Water sand -----	16	90
Clay seal, sand -----	3	93
Water sand -----	17	110
Hard clay -----	4	114

4/3-6K2. George Tyler. Altitude about 2,880 feet. Drilled by L. F. McFadden in 1951. 8-inch casing. Yielded 40 gpm. Water temperature 63°F.

No entry -----	1	1
Top soil -----	6	1
Hard clay -----	2	9
Dry sand -----	5	14
Clay -----	36	50
Sand -----	12	62
Hard clay -----	3	65
Coarse water sand -----	23	88
Hard clay -----	3	91

4/3-6P2. Jess Ranch. Altitude about 2,860 feet. Drilled by F. D. McDougall in 1948. 12-inch casing, perforated from 40 to 80 feet and 108 to 130 feet.

Fine sandy soil -----	2	2
Brown sand and rocks -----	13	11
Fine gray sand -----	16	28
Large dry gravel -----	4	42
Coarse dry sand -----	7	42
Large gravel, coarse sand, bearing some water -----	4	45
Coarse sand -----	2	72
Large gravel, coarse sand -----	24	112
Coarse sandy clay -----	40	120
Sand and gravel -----	8	153
Sandy clay -----	38	166
Sand and gravel -----	8	198
Clay -----	32	216
Layers of gravel and clay -----	18	

4/3-6P3. Jess Ranch, formerly Anna Soroboe. Altitude about 2,880 feet. Drilled by F. D. McDougall in 1951. 8-inch casing, perforated from 56 to 94 feet.

	Material	Thickness (feet)	Depth (feet)
1	Top soil -----	2	2
7	Brown sandy clay -----	22	24
9	Dry gravel -----	2	26
55	Very fine sand -----	15	41
70	Brown sandy clay -----	2	43
74	Fine brown sand, bearing water -----	8	51
90	Coarse gray sand and gravel -----	2	53
93	Very fine sand -----	9	62
10	Coarse sand and gravel -----	2	64
14	Fine sand -----	5	69
	Coarse sand and large gravel -----	27	96

4/3-6R1. S. A. Day. Altitude about 2,915 feet. Drilled by Oro Grande Farm Implement Co. in 1956. 8-inch casing.

1	Top soil -----	4	4
7	Sand and clay, cemented -----	12	16
9	Loose sand -----	44	60
14	Buff colored clay -----	4	64
50	Coarse gravel to 4 inches -----	12	76
62	Tan clay, compact -----	11	87
65	Coarse gravel to 10 inches -----	6	93
88	Tan clay -----	2	95
91	Loose sand -----	41	136
	Soft sandy clay -----	2	138

4/3-6R2. B. O. Mosher. Altitude about 2,920 feet. Drilled by Edward and Harold Moss in 1949. 8-inch casing, perforated for 35 feet.

2	Top soil -----	4	4
15	Hardpan -----	11	15
31	Sandy shale -----	31	46
35	Soft running sand -----	27	73
42	Coarse water gravel -----	23	96

4/3-6R3. W. A. McVeigh. Altitude about 2,885 feet. Drilled by F. D. McDougall in 1948. 8-inch casing.

16	Top soil -----	5	5
48	Clay rib -----	2	7
72	Dead sand -----	64	71
112	Washed sand and gravel -----	13	84
120	Hard sand -----	1	85

4/3-6R4. David B. Lackey. Altitude about 2,890 feet. Drilled by Ross and French in 1948. 8-inch casing to 86 feet.

Material	Thickness (feet)	Depth (feet)
Top soil -----	6	6
Coarse sand with clay lenses grading to a thin stratum of fine gravel, carrying water -----	48	54
No entry -----	22	76
River sand and coarse rock -----	15	91

4/3-7K3. C. G. Lewis. Altitude about 2,870 feet. Drilled by F. D. McDougall in 1948. 14-inch casing, perforated from 40 to 70 feet, 104 to 112 feet, and 134 to 136 feet.

Fine dry sand -----	6	6
Coarse dry sand -----	30	36
Water sand -----	6	42
Light clay -----	3	45
Large rock, gravel -----	25	70
Sandy clay -----	35	105
Sand and gravel -----	5	110
Sandy clay -----	28	138
Sand and gravel -----	6	144
Sand and clay -----	8	152
Light clay -----	10	162

4/3-9E1. John M. Hull. Altitude about 3,025 feet. Drilled by Scoggin Drilling and Development Co. in 1952. 16-inch casing, perforated from 300 to 500 feet.

Soil and sand -----	15	15
Loose gravel -----	25	40
Sandy shale -----	30	70
Swelling? shale -----	110	180
Water gravel -----	25	205
Swelling? shale -----	60	265
Boulders and gravel -----	40	305
Swelling? shale and boulders -----	105	410
Gravel and shale -----	91	501

4/3-901. A. Mendel. Altitude about 3,030 feet. Drilled by J. H. Scoogin in 1950. 16-inch casing, perforated from 278 to 494 feet.

Material	Thickness (feet)	Depth (feet)
Top soil -----	10	10
Gravel -----	15	25
Coarse gravel -----	38	63
Hard sand with boulders -----	37	100
Hard boulders in shale -----	28	128
Sandy shale -----	28	156
Hard sand -----	4	160
Boulders in shale -----	30	190
Hard shale -----	30	220
Boulders in shale -----	70	290
Water sand, fine -----	60	350
Water gravel -----	100	450
Water gravel with broken shale streaks -----	44	494

4/3-10B1. T. G. Cristilly. Altitude about 3,035 feet. Drilled by David Engel in 1956. 8-inch casing.

Sand -----	5	5
Caliche -----	6	11
Sand -----	10	21
Hardpan -----	14	35
Sandy gravel -----	15	50
Sandy clay -----	6	56
Sand -----	10	66
Caliche -----	4	70
Sand -----	10	80
Sandy clay -----	10	90
Clay - sand -----	65	155
Sand -----	15	170
Sandy clay -----	34	204
Water sand -----	18	222
Clay -----	2	224
Water sand -----	12	236
Clay -----	1	237

4/3-12D1. John Weibel. Altitude about 3,095 feet. Drilled by Howard H. Ley in 1951. 10-inch casing, perforated from 245 to 308 feet. Yielded 9 gpm with 19-foot drawdown. Water temperature 70°F.

Material	Thickness (feet)	Depth (feet)
Soil -----	3	3
Clean coarse sand -----	76	79
Tough yellow clay and coarse sandy streaks -----	37	116
Coarse sandy clay -----	48	164
Coarse sand and a small amount of clay -----	21	185
Tough yellow clay -----	25	210
Sandy clay and silt, formation soft and muddy -----	60	270
Fine sand and water -----	1	271
Yellow clay -----	8	279
Coarse sand, small amount water -----	1	280
Very fine silty clay -----	40	320
Open hole, sandy clay -----	15	335

4/3-17D1. L. Disney, formerly Margaret Dammert, formerly D. W. McPherson. Altitude 2,866.8 feet. Deepened by F. D. McDougall in 1950. 10-inch casing, perforated from 44 to 7 $\frac{1}{2}$ feet.

Surface material -----	15	15
Large rocks and gravel -----	37	22
Coarse sand and gravel -----	19	21
Hard clay -----	5	76

4/3-17G1. Arthur E. Martinson. Altitude about 2,960 feet. Drilled by Ephraim Harris in 1943. 10-inch casing, perforated from 112 to 128 feet.

Soil -----	8	8
Soil, sand, and gravel -----	24	32
Quicksand -----	48	80
Sand and gravel -----	10	90
Sand and gravel, good -----	42	152
Sandy clay -----	3	135

4/3-18A1. Earl MacGillevary. Altitude about 2,875 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 48 to 99 feet.

Sand -----	30	30
Gravel -----	2	34
Sandy clay -----	2	73
Sand, water -----	39	86
Clay, sand -----	15	95
Gravel -----	7	101
Clay -----	6	

4/3-18H2. C. Michael. Altitude about 2,860 feet. Drilled by F. D. McDougall in 1951. 11-inch casing.

	Thickness	Thickness (feet)	Depth (feet)
Dry sand -----	32	32	
Water-bearing coarse sand -----	9	41	
Coarse sand and rocks -----	15	56	
Clay with sandy clay lenses -----	7	63	
Water sand -----	3	66	
Sandy clay -----	3	69	

4/3-18H6. Price V. Reeves. Altitude about 2,870 feet. Drilled by F. D. McDougall in 1950. 8-inch casing, perforated from 26 to 67 feet.

Silt -----	3.5	3.5
Dry sand -----	28.5	32
Coarse sand and rocks -----	10	42
Sandy clay -----	4	46
Coarse water sand and gravel -----	24	70
Sandy clay -----	1	71

4/3-18H8. B. Dunbar. Altitude about 2,870 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 31 to 71 feet.

Sand -----	36	36
No entry -----	3	39
Sand -----	2	41
Sand, water -----	27	68
Clay - sand -----	6	74

4/3-29N2. J. Wiens. Altitude about 2,920 feet. Drilled by F. D. McDougall in 1952. 10-inch casing, perforated from 54 to 75 feet and 80 to 97 feet.

Top soil -----	3	3
Coarse dry sand and small gravel -----	31	34
Large gravel and rocks -----	12	46
Coarse sandy clay and rock, bearing small amount of water -----	18	64
Fine sandy clay -----	6	70
Coarse sand and small gravel -----	5	75
Sandy clay -----	5	80
Water sand and gravel -----	22	102

4/3-30A1. F. J. Whicher. Altitude about 2,900 feet. Drilled by F. D. McDougall in 1948. 12-inch casing, perforated from 42 to 72 feet.

Surface material -----	37	37
Sand and gravel streaks -----	35	72

4/3-30A2. J. Howell. Altitude about 2,900 feet. Drilled by F. D. McDougall in 1948. 12-inch casing, perforated from 46 to 67 feet.

Material	Thickness (feet)	Depth (feet)
Sand -----	39	39
Sandy clay -----	7	46
Boulders and gravel -----	21	67
Sandy gravel -----	9	76

4/3-31L4. W. Hupfeld. Altitude about 2,910 feet. Drilled by F. D. McDougall in 1951. 12-inch casing.

Dry sand and gravel -----	38	38
Dry sand, gravel and rocks -----	10	48
Dry sand with clay ribs -----	4	52
Coarse water sand and gravel -----	5	57
Hard sandy clay -----	6	63
Coarse water sand and gravel -----	7	70
Clay -----	9	79
Sand and gravel -----	4	83
Clay -----	9	92
Sandy clay -----	20	112
Silt -----	6	118
Small rocks and sand -----	2	120
Clay -----	2	122
Sand -----	24	146
Light sandy clay -----	2	148

4/3-32C1. V. A. Johnson. Altitude about 3,040 feet. Drilled by David Engel in 1955. 8-inch casing, perforated from 200 to 242 feet.

Sand -----	4	4
Caliche -----	8	12
Sand -----	16	28
Boulders, caliche -----	40	68
Sand -----	50	118
Boulders -----	12	130
Caliche -----	5	135
Sand, clay and gravel -----	25	160
Hard sand -----	38	198
Water sand -----	44	242

4/3-32El. K. M. Meahl. Altitude about 3,000 feet. Drilled by David Ingel in 1955. 8-inch casing, perforated from 162 to 206 feet.

Material	Thickness (feet)	Depth (feet)
Sand clay -----	8	8
Sandy gravel -----	16	24
Boulders -----	4	28
Caving sand -----	30	58
Caliche -----	2	60
Sand -----	13	73
Boulders -----	6	79
Caving sand -----	15	94
Clay - sand -----	41	135
Boulders -----	5	140
Clay -----	22	162
Hard sand -----	10	172
Water sand -----	33	205

4/4-13Bl. H. I. Pollard. Altitude about 2,850 feet. Drilled by Water Well Supply Co. in 1949. 14-inch casing, perforated from 100 to 270 feet.

Top soil -----	10	10
Fine sand and rock -----	60	70
Water sand and gravel -----	90	160
Clay and boulders -----	50	210
Water sand and gravel -----	45	255
Clay and boulders -----	15	270

4/4-13Jl. H. I. Pollard. Altitude about 2,850 feet. Drilled by R. E. Roberts in 1936. 16-inch casing, perforated from 120 to 125 feet, and from 153 to 348 feet.

Sand -----	15	15
Clay -----	14	29
Gravel, fine -----	21	50
Clay -----	15	65
Gravel, fine -----	5	70
Clay -----	28	98
Gravel -----	15	113
Clay -----	7	120
Gravel, casing perforated -----	5	125
Clay -----	28	153
Gravel, casing perforated -----	17	170
Clay -----	5	175
Gravel, casing perforated -----	13	188
Clay -----	61	249
Gravel, casing perforated -----	99	348

4/4-21C1. Formerly Appleton Land, Water and Power Co., Altitude 3,200.0 feet. 8-inch casing. Log copied from California Department of Engineering (1918). Well destroyed.

Material	Thickness (feet)	Depth (feet)
Soil -----	26	26
Cemented gravel formation -----	368	394
Clay -----	11	405
Sand -----	6	411
Sandy clay -----	30	441
Water gravel -----	24	465
Clay -----	7	472
Water gravel -----	14	486
Clay with sand layers -----	267	753

4/4-24G1. Hesperia Water Co. Altitude about 2,960 feet. Drilled by J. M. Scoggin in 1947. 12- and 14-inch casing, perforated for 250 feet.

Top soil -----	10	10
Gravel -----	15	25
Boulders and rock -----	50	75
Gravel and rock -----	65	140
Water sand -----	210	350
Water sand and boulders -----	100	450

4/4-24N1. Hesperia Water Co., formerly Appleton Land, Water and Power Co. Altitude about 2,995 feet. Drilled by J. M. Scoggin in 1947. 12- and 14-inch casing, perforated for 250 feet.

Top soil -----	10	10
Gravel -----	30	40
Boulders and gravel -----	120	160
Solid rock -----	10	170
Water sand -----	70	240
Boulders and gravel -----	30	270
Water sand -----	50	320
Boulders and gravel -----	45	365
Rock -----	20	385
Water sand -----	65	450
Rock -----	2	452

Altitude
partment

Depth (feet)
26
394
405
411
411
465
472
486
753

Drilled
for 250

Water and
gin in 1947.

4/4-25-NL Hesperia Water Co., formerly Appleton Land, Water and Power Co. Altitude about 3,040 feet. Drilled by J. H. Scoggins in 1947. 12- and 14-inch casing, perforated for 250 feet.

Material	Thickness (feet)	Depth (feet)
Top soil -----	10	10
Gravel bed -----	68	78
Gravel and boulders -----	62	140
Rock, solid -----	5	145
Rock, solid -----	7	152
Boulders and gravel -----	38	190
Water sand -----	50	240
Boulders -----	10	250
Gravel, hard and soft -----	20	270
Solid rock -----	10	280
Water sand -----	20	300
Boulder streaks, hard -----	40	340
Water sand -----	65	405
Water sand and gravel -----	111	516

4/4-29-1. Appleton Land, Water and Power Co. Altitude about 3,365 feet. Drilled by T. W., I. M., and R. H. Heath in 1924. Well destroyed.

Sand and gravel -----	220	220
Clay streaks, gravel -----	40	260
Hard sand and clay -----	105	365
Clay, sand, gravel, water -----	35	400
Hard sand, clay, gravel, water -----	390	790
Sand, clay -----	60	850
Sand and gravel -----	35	885
Lime, talc, clay, hard sand and gravel -----	223	1,108
Sandy shale -----	7	1,115
Hard sand, sticky shale, clay -----	230	1,345
Sand -----	5	1,350
Hard sand, sticky shale -----	275	1,625
Sand -----	35	1,660
Clay, hard sand, sandy shale, sticky clay and shale -----	260	1,920
Sharp sand, apparently water sand but no water -----	10	1,930
Clay, brown shale, hard sand, sticky shale, lime -----	130	2,060
Packed sand -----	15	2,075
Blue and brown shale, sticky shale, sandy clay -----	195	2,270
Sticky brown shale -----	75	2,345
Sand -----	10	2,355
Sticky clay, sand, shale -----	80	2,435
Sandy shale, hard sand -----	20	2,455

Continued

4/4-29-1.--Continued.

Material	Thickness (feet)	Depth (feet)
Sandy brown clay -----	20	2,475
Brown sandy clay, streaks blue sand, sticky shales -----	45	2,520
Sticky shale -----	28	2,548
Sandy shale -----	27	2,575
Sticky shale -----	35	2,610
Sandy shale, hard sand, sandy shale -----	135	2,745
Sand, gravel, shale, hard sand -----	70	2,815
Hard sand formation -----	126	2,941
Lime, belching -----	32	2,973
Hard sand -----	21	2,994
Lime stone (?) -----	86	3,080
Hard sand streaked with shale -----	23	3,103

4/4-35D1. Hesperia Water Co., formerly Appleton Land, Water and Power Co. Altitude about 3,175 feet. Drilled by J. M. Scoggin in 1946. 10- and 12-inch casing, perforated for 390 feet.

Top soil -----	10	10
Loose gravel -----	40	50
Hard lenses, cemented sand -----	10	60
Sand and gravel -----	70	130
Sand and boulders -----	30	160
Shale and boulders, hard -----	173	333
Hard shale and rock -----	45	378
Water sand -----	38	416
Boulders -----	14	430
Water sand, coarse gravel -----	30	460
Water sand, fine -----	8	468
Water sand with shale lenses -----	238	706

4/5-1K2. R. S. Ward. Altitude about 3,233 feet. Drilled by C. C. Lackyard in 1946. 6-inch casing, perforated from 412½ to 492½ feet.

Surface material -----	10	10
Decomposed granite -----	25	35
Layers of clay 1 to 2 feet thick interbedded with layers of wash gravel 3 to 6 feet thick -----	55	90
Fine sandy clay -----	289	375
Swelling clay -----	2	385
Water -----	4	387
Swelling clay -----	2	406
Water in fine sandy clay -----	19	411
Swelling clay -----	4	420
6-inch to 1-foot streaks of clay with 1 to 2-foot streaks of good aquifer in a heavy gravel and clay formation -----	90	520

183
Table 6

4/5-3G1. Stephen Lockwood. Altitude about 3,310 feet. Drilled by F. D. McDougall in 1955. 10-inch casing, perforated from 553 to 434 feet. Yielded 14 gpm.

Material	Thickness (feet)	Depth (feet)
Top soil -----	18	18
Gravely brown sand -----	34	52
Lightbrown sandy clay -----	26	78
Rocky brown sand -----	37	115
Light brown sandy clay -----	20	135
Dark gray sandy clay -----	35	170
Brown sandy clay -----	68	238
Dark gray sandy clay -----	122	360
Brown sandy clay -----	35	395
Dark gray sandy clay -----	15	410
Sticky gray clay -----	24	434
Water in fine sand -----	10	444
Sticky brown clay -----	51	495
Water in fine sand -----	17	512
Sticky dark gray clay -----	26	538
Water gravel -----	15	553
Sticky brown clay -----	12	565

4/5-5R1. C. R. Hudson, formerly Rancho Verde. Altitude 3,390.0 feet. 12-inch casing. Copied from California Department of Engineering (1918).

Soil -----	13	13
Cemented gravel formation -----	37	50
Sand and clay -----	38	88
Sand and gravel -----	40	128
Cemented gravel -----	93	221
Clay and sand -----	56	277
Sand and gravel -----	43	320
Sand and clay -----	189	509
Fine sand and water -----	61	570
Clay -----	22	592
Fine sand -----	3	595
Clay -----	25	620
Sand -----	2	622
Clay -----	2	624
Sand -----	6	630
Clay -----	14	644

184
Feb. 6

4/5-27J1. LeRoy Roler. Altitude about 3,665 feet. Drilled by
R. Wilson. 8-inch casing.

Material	Thickness (feet)	Depth (feet)
Clay	190	190
Sand	14	204
Clay	12	216
Sand	12	228
Gravel, water bearing	4	232
Sand	29	261
Sand and clay	39	300
Clay	12	312
Sand	23	335
Clay	71	406
Rock	8	414
Clay	18	432
Clay and gravel	37	469
Very coarse gravel	9	478
Blue clay	25 $\frac{1}{2}$	508 $\frac{1}{2}$

4/5-28N1. Mrs. Bessire. Altitude about 3,685 feet. Drilled by
Howard Ley in 1947. 10-inch casing. Well destroyed.

Clay	40	40
Sand	14	54
Clay	12	66
Sand	12	78
Gravel, water bearing	4	82
No entry	219	301

4/5-31K1. C. J. Willman. Altitude about 3,955 feet. Drilled by
Cozart Drilling Co. in 1948. 6-inch casing.

Sandy clay	110	110
Coarse sand	30	140
Soft sand	5	145
Coarse sand	85	230
Sandstone	70	300

5/1-31J1. Z. V. McBride. Altitude about 3,000 feet. Drilled by
J. S. Gobar in 1937 and deepened by F. D. McDougall. 9-inch casing.

Decomposed granite	87	87
Very hard rock	47	134

5/
David E
date.

5/2

L. F. Mc
Hard-pac
Rock ---
Hard san
Clay ---
Rock ---
Clay ---
Hard san
Decompos
Sand cla
Decompos
Hard san
Sand cla
Clay and
Sand ---
Water and
Clay and

5/2.

F. D. Mc
feet.

Coarse br
Hard brow
Light san
Hard brow
Light san
Light cla
Light san
Fine sand

5/2-4Al. E. A. Payne. Altitude about 3,180 feet. Drilled by David Engel in 1957. 8-inch casing. Will continue drilling at a later date.

Material	Thickness (feet)	Depth (feet)
Sand and clay -----	40	40
Fine sand, dry -----	44	84
Boulders, 2-3 feet in diameter -----	22	106
Clay -----	3	109
Boulders, 2-3 feet in diameter -----	11	120
Clay -----	2	122
Boulders, 2-3 feet in diameter -----	15	137

5/2-6M1. N. S. West. Altitude about 3,120 feet. Drilled by L. F. McFadden in about 1954, later deepened. 9-inch casing.

Hard-packed sand -----	78	78
Rock -----	5	83
Hard sand -----	7	90
Clay -----	4	94
Rock -----	1	95
Clay -----	3	98
Hard sand -----	22	120
Decomposed granite -----	15	135
Sand clay -----	25	160
Decomposed granite -----	38	198
Hard sand -----	12	210
Sand clay -----	25	235
Clay and sand -----	24	259
Sand -----	1	260
Water and sand -----	32	292
Clay and sand -----	?	?

5/2-19M1. J. N. DeGuire. Altitude about 2,960 feet. Drilled by F. D. McDougall in 1948. 8-inch casing, perforated from 129 to 146 feet.

Coarse brown sand -----	7	7
Hard brown clay -----	3	10
Light sandy clay -----	17	27
Hard brown clay -----	4	31
Light sandy clay -----	56	87
Light clay, small rock -----	8	95
Light sandy clay -----	39	134
Fine sand bearing water -----	17	151

5/2-25A1. L. W. Luley. Altitude about 3,280 feet. Drilled by J. S. Gobar in 1950. Well dry, casing pulled.

Material	Thickness (feet)	Depth (feet)
Coarse decomposed granite soil -----	6	6
Decomposed granite soil -----	70	76
Decomposed granite soil with rocks -----	4	80
Decomposed granite soil -----	30	110
Decomposed granite soil with rocks -----	37	147
Decomposed granite soil with clay -----	37	184
Brown sandy clay -----	26	210
Yellow clay -----	13	223
Reddish-brown clay -----	4	227
Granite rocks (boulders) -----	10	237
Brown clay -----	4	241
Granite rocks (boulders) -----	19	260

5/2-31M1. M. Faust. Altitude about 2,975 feet. Drilled by C. Steele in 1951. 10-inch casing, perforated from 152 to 200 feet.

Top soil -----	5	5
Hardpan -----	4	9
Soft soil -----	17	26
Hard-packed clay, sand and gravel -----	28	54
Sticky gray clay, sand and gravel -----	42	96
Sticky gray-green clay -----	12	108
Solid packed reddish-brown sand -----	41	149
Coarse sand and crushed rock, water bearing -----	2	151
Blue granite rock -----	15	166
Crushed rock, no water -----	8	174
Granite rock, sand and rock, water bearing -----	59	233
Coarse sand and crushed rock, water bearing -----	2	235

A 5/2-32K1. R. Mefferd. Altitude about 3,020 feet. Drilled by Myers Drilling Service in 1948. 16-inch casing, perforated from 210-350 feet. 6-inch test hole 625 feet deep, reamed to 16 inches to 350 feet. Yielded 600 gpm, drawdown 65 feet.

Clay -----	25	25
Sand (coarse) -----	25	50
Clay -----	15	65
Hard brown shale -----	43	108
Sand -----	22	130
Sand and streaks of clay -----	50	180
Sand, very little clay -----	160	340
Sandy clay -----	100	440
Hard sand and clay -----	70	510
Very hard formation -----	70	580
Hard shale with streaks of shell -----	17	597
Decomposed granite (very hard at the bottom) -----	28	625

5/3-3Q1. Antonio Bioletto. Altitude about 2,917 feet. Drilled by Paul Waas in 1949. 8-inch casing, perforated from 80 to 100 feet.

Material	Thickness (feet)	Depth (feet)
Surface soil -----	6	6
Decomposed granite soil, sandy -----	22	28
Clay, with lenses of red sand -----	28	56
Yellow clay -----	12	68
Clay with lenses of sand and gravel -----	4	72
Water-bearing gravel -----	1	73
Very compact clay -----	8	81
Water-bearing clean gravel and sand with lenses of clay 4-12 inches thick -----	15	96
Compact clay -----	11	107

5/3-9D1. J. Mrzena, formerly A. L. Domike. Altitude about 2,920 feet. Drilled by Howard H. Ley in 1951. 10-inch casing, perforated from 86 to 100 feet and 147 to 154 feet.

Soil and caliche -----	87	87
Coarse sand, water -----	7	94
Sandy clay -----	21	115
Blue clay -----	8	123
Dark gray and brown clay -----	8	131
Tough yellow clay -----	19	150
Blue clay -----	5	155
Coarse sand -----	3	158
Dark brown clay -----	5	163
Blue clay -----	2	165
Yellow clay -----	6	171
Caliche, white clay -----	5	176
Gray clay, sand, a few pebbles, no water -----	11	187
Gravely clay, small sharp rock -----	11	198
Cemented sand and boulders -----	5	203

5/3-10P1. J. B. Brooks. Altitude about 2,905 feet. Drilled by J. B. Brooks in 1957. 9-inch casing, perforated from 71 to 171 feet.

Dry sand and clay -----	80	80
Coarse sand and gravel -----	70	150
Blue clay -----	1	151
Medium grain-sized gravel -----	20	171

100

5/3-1GP2. 4. Jost. Altitude about 2,903 feet. Drilled by J. B. Brooks in 1956. 8-inch casing, perforated from 110 to 150 feet.

Material	Thickness (feet)	Depth (feet)
Dry clay and sand -----	90	90
Fine gravel -----	20	110
Sandy clay, water -----	20	130
Layers of clay and sand -----	20	150

5/3-10P3. D. Kiley. Altitude about 2,905 feet. Drilled by J. B. Brooks in 1956. 9-inch casing, perforated for 52 feet. Yielded 25 gpm with 1-foot drawdown.

Sand and clay	15	15
Coarse sand	10	25
White clay	15	60
Medium grain-sized sand	60	100
Medium grain-sized gravel	50	150
Blue clay	2	152

5/3-12H2. F. Mitchell. Altitude about 2,973 feet. Drilled by David Engel in 1953. 8-inch casing, perforated from 125 to 169 feet.

Top soil	7
Clay sand	30
Shale	4
Clay	4
Shale	3
Clay	30
Sand	34
Shale	13
Water sand	8
Clay	5
Sand	3
Decomposed granite	6
Hard sand	13
Water sand	10
Clay	2

Drillé
131-14

Soil a
 Sand a
 Clay a
 Sand a
 Fine s
 Clay a
 Coarse
 Clay a
 Coarse
 Clay a
 Coarse
 Clay --
 Good c
 inch
 Clay --
 Coarse

Coarse
Clay --
Fine sa
Clay --
Coarse
Clay --
Hard sh
Blue cl

feet. 1
Sandy sh
Sand an
Sand an
Sandy cl
Sand and

5/3
by F. Ma
Yields 2

Clay, sa
Very fin
Sand 1/1
Sand and
Coarse

189
Table 6

5/3-22A1. R. Werner, formerly C. Marshal. Altitude 2,923.6 feet.
Drilled by Elvriam Harris in 1946. 12-inch casing, perforated 89-98,
131-140, 161-163, 175-176, 198-202, 203-204, 208-209 and 241-246 feet.

Material	Thickness (feet)	Depth (feet)
Soil and clay -----	89	89
Sand and gravel to 1 inch -----	9	98
Clay and silt -----	33	131
Sand and gravel to 1 inch -----	9	140
Fine sand and dirt -----	5	145
Clay and silt -----	16	161
Coarse sand and gravel to 3/4 inch -----	2	163
Clay and silt -----	12	175
Coarse sand and gravel to 3/8 inch -----	1	176
Clay and silt -----	22	198
Coarse sand and gravel to 1/2 inch -----	4	202
Clay -----	1	203
Good coarse sand and gravel to 1/2 inch -----	1	204
Clay -----	4	208
Coarse sand and gravel to 1/2 inch -----	1	209
Clay -----	11	220
Fine sand -----	2	222
Clay -----	19	241
Coarse sand and gravel to 3/8 inch -----	5	246
Clay -----	7	253
Hard shale -----	7	260
Blue clay -----	7	267

5/3-23H2. T. V. Smith, formerly P. Rulon. Altitude about 2,925
feet. Drilled by L. O. Cozart in 1947. 8-inch casing.

Sandy shale -----	81	81
Sand and clay with lenses of gravel -----	14	95
Sand and gravel -----	15	110
Sandy clay -----	10	120
Sand and gravel -----	33	153

5/3-23Q1. B. F. Caddie. Altitude is about 2,930 feet. Drilled
by F. Marr in 1955. 8-inch casing, perforated from 100 to 200 feet.
Yields 291 gpm with 112-foot drawdown.

Clay, sand and gravel -----	50	50
Very fine sand -----	40	90
Sand 1/16 inch -----	60	150
Sand and caliche -----	12	162
Coarse water sand -----	38	200

5/3-24D2. H. Scholler. Altitude is about 2,920 feet. Drilled by J. B. Brooks in 1955. 8-inch casing, perforated from 96 to 136 feet and from 186 to 216 feet.

Material	Thickness (feet)	Depth (feet)
Dry sand and clay	70	70
Water sand, medium	10	80
Sandy silt	10	90
Coarse sand and clay	10	100
Sandy clay	20	120
Coarse water sand	20	140
Clay	10	150
Coarse water sand	10	160
Brown clay	30	190
Coarse sand and clay	5	195
Coarse water sand	19	214
Clay bottom	2	216

5/3-24D3. Formerly E. J. Crumpacker. Altitude is about 2,920 feet. Drilled by A. T. Cawse. 8-inch casing, perforated from 157 to 197 feet.

Top soil	4	15
Hardpan	12	16
Sandy clay	30	84
Hard sand	38	84
Yellow clay	64	112
Light colored water sand	12	160
Streaks of gray shale in packed sand	22	162
Coarse water sand	13	195
Hard clay	2	197

5/3-24M1. B. B. Mathews, Jr. Altitude about 2,923 feet. Drilled by C. C. Lackyard in 1950. 8-inch casing, perforated from 177 to 213 feet and from 243 to 279 feet.

Surface material	3	15
Hardpan	12	60
Brown sandy clay	45	96
Cemented brown sand	36	108
Very fine sand, silt, water	12	129
Brown clay	21	139
Brown sand and clay in lenses 1-2 feet thick	37	166
Fine-grained sand, water	2	168
Brown clay	12	186
Water	6	192
Brown clay	13	199

Continued

Fine
Brown
Medium
Brown
Medium
Brown
No ent
Water
Brown
Water
Blue c

5/
David E

Top soi
Caliche
Clay --
Fine sa
Fine sa
Coarse
Gravel
Sand an
Clay --
Sand co
Clay --
Sand --
Clay --
Sand and
Gravel,
Clay --

5/
L. F. Mc
Yielded
Clay --
Clay and
Sand --
Clay --
Water sa
Clay --

5/3-24ML--Continued.

Material	Thickness (feet)	Depth (feet)
Fine gray sand, water -----	6	205
Brown clay -----	6	211
Medium brown sand, water -----	2	213
Brown clay -----	29	242
Medium brown sand, water -----	6	248
Brown clay -----	4	252
No entry -----	4	256
Water -----	4	260
Brown clay, medium -----	5	265
Water sand -----	13	278
Blue clay -----	7	285

5/3-25D3. R. E. Pollard. Altitude about 2,930 feet. Drilled by David Engel in 1957. 6-inch casing.

Top soil -----	3	3
Caliche -----	4	7
Clay -----	7	14
Fine sand -----	6	20
Fine sand and clay -----	20	40
Coarse sand -----	20	60
Gravel -----	10	70
Sand and clay -----	17	87
Clay -----	15	102
Sand containing water -----	5	107
Clay -----	10	117
Sand -----	10	127
Clay -----	11	138
Sand and clay -----	10	148
Gravel, sand -----	9	157
Clay -----	2	159

5/3-25ML. J. P. Bellott. Altitude about 2,940 feet. Drilled by L. F. McFadden in 1950. 9-inch casing, perforated from 4 to 138 feet. Yielded 35 gpm with 142 feet of drawdown. Water Temperature 63°F.

Clay -----	12	12
Clay and sand -----	73	85
Sand -----	5	90
Clay -----	14	104
Water sand with gravel -----	35	139
Clay -----	2	141

192
Table 6

5/3-25-1. Paul H. Pernworth. Drilled by C. Steele and Sons in 1951. 10-inch casing, perforated from 118 to 184 feet. Yielded 280 gpm with 125 feet of drawdown.

Material	Thickness (feet)	Depth (feet)
Sandy top soil -----	4	4
Hard brown clay -----	22	26
Soft light brown clay -----	4	30
Red soil carrying coarse sand and gravel -----	32	62
Hard-packed gray silt -----	8	70
Hard blue-green clay -----	10	80
Coarse sand and gravel -----	22	102
Water-bearing-coarse sand and gravel -----	4	106
Clay -----	9	115
Ledge rock -----	2	117
Clay -----	4	161
Water-bearing sand and cobbles -----	6	167
Water-bearing coarse sand, rock and gravel -----	14	181
Hard clay -----	3	184

5/3-26Fl. Pacific Water Co. Altitude about 2,945 feet. Drilled by Marr Drilling Co. in 1953. 12-inch casing.

Clay -----	75	75
Caliche and fine sand -----	43	118
Coarse sand -----	72	190
Clay and sand -----	50	240
Coarse sand -----	22	262
Fine sand -----	28	290
Clay and water sand -----	85	375
Coarse sand and clay -----	25	400
Water sand -----	20	420
Sandy clay -----	25	445
Water gravel -----	59	504

5/3-27El. Apple Valley Ranchos Water Co. Altitude about 2,955 feet. Drilled by L. C. Finnell in 1953. 20-inch casing, perforated from 185 to 465 feet.

Material	Thickness (feet)	Depth (feet)
Sandy clay -----	61	61
Sand -----	7	68
Sandy clay -----	53	121
Sand and streaks of clay -----	11	132
Sand -----	3	135
Sand and clay -----	19	154
Sand, pea gravel, and some clay -----	61	215
Sand and gravel, small -----	7	222
Sand and gravel, medium -----	73	295
Sand and clay streaks -----	33	328
Sand and gravel, medium -----	8	336
Fine sand and some clay -----	89	425
Coarse sand, small gravel and some clay -----	95	520
Sandy clay -----	75	595
Compact blue clay -----	40	635
Soft fine sand -----	22	657
Interbedded blue and brown clay -----	6	663
Soft blue clay and fine sand -----	80	743

5/3-28Al. Apple Valley Ranchos Water Co., formerly W. W. Hitchcock. Altitude 2,951.5 feet. Drilled in 1912. 14-inch casing. Copied from California Department of Engineering (1918). Well has cement cap.

Soil -----	3	3
Clay -----	11	14
Decomposed granite and clay -----	105	119
Water gravel -----	16	135
Sandy clay -----	16	151
Water gravel -----	3	154
Sand and clay -----	25	179
Water sand -----	4	183
Sand and clay -----	17	200
Water sand -----	14	214
Sand and clay -----	10	224
Water sand -----	14	238
Clay -----	4	242
Water sand -----	7	249
Sand, gravel and clay -----	72	321
Sand -----	3	324
Clay -----	29	353
Water gravel -----	14	367
Clay and fine sand -----	64	431

Continued

Table 5

5/3-28Al.--Continued.

Material	Thickness (feet)	Depth (feet)
Water gravel -----	16	447
Clay -----	4	451
Cemented gravel -----	13	464
Water gravel -----	4	468
Clay and sand -----	24	492

5/3-30Nl. W. Pattison. Altitude 2,845.8 feet. Drilled by Ephraim Harris, deepened by F. D. McDougall in 1951: 12-inch casing, perforated from 66 to 89 feet.

Open pit of original well -----	45	45
Sand, rocks, and cement -----	6	51
Sticky clay -----	2	53
Concrete, rocks, and clay -----	5	58
Fine sand -----	8	66
No entry -----	2	68
Coarse sand, gravel and large rocks -----	24	92
Clay -----	1	93

5/3-31Bl. W. Pattison. Altitude about 2,860 feet. Drilled by Howard Ley in 1954. 16-inch casing, perforated from 50 to 92 feet, 110 to 113 feet, 124 to 150 feet, 160 to 165 feet, and 180 to 220 feet.

Soil -----	6	6
Caliche -----	14	20
Yellow, sandy clay -----	3	23
Coarse sand, some $\frac{1}{2}$ -inch gravel -----	15	38
Clay, gray -----	3	41
Coarse sand -----	2	43
Gray silty clay -----	9	52
Coarse bright sand -----	1	61
Silty gray clay -----	8	68
Coarse sand, gravel and 3-inch rock -----	7	69
Green and yellow clay -----	1	73
Yellow clay lenses, coarse sand and gravel streaks -----	4	73
Coarse sand, gravel and rock to 6 inches, firm -----	12	85
Coarse sand, gravel and rock to 2 inches, loose -----	7	92
Yellow clay -----	18	110
Coarse sand, dirty -----	3	113
Yellow sandy clay -----	11	126
Coarse sand, $\frac{1}{2}$ -inch gravel -----	5	129
Yellow clay, sand and gravel streaks -----	7	136

Continued

5/3-31B1.--Continued

Material	Thickness (feet)	Depth (feet)
Yellow sandy clay -----	5	141
Sand and clay streaks -----	8	149
Caliche -----	3	152
Tough yellow clay -----	8	160
Coarse sand, 3/4-inch gravel -----	5	165
Tough yellow clay and caliche -----	16	181
Dirty sand, some $\frac{1}{2}$ -inch gravel -----	4	185
Coarse sand -----	2	187
50 percent fine-and-50 percent coarse sand, water -----	18	205
Coarse bright sand, 20 percent 3/4-inch gravel -----	8	213
Coarse bright sand, tight -----	7	220
Sandy clay -----	5	225
Yellow clay -----	3	228

5/3-31Q3. E. J. McElroy. Altitude about 2,850 feet. Drilled by Oro Grande Farm Implement Co. in 1957. 8-inch casing.

Top soil -----	1	1
Brown clay -----	2	3
Tan clay -----	7	10
Loose sand -----	6	16
Brown silt -----	11	27
Loose sand -----	11	38
Gravel clay cemented 4 inches -----	5	43
Loose sand 1 inch -----	19	62
Gravel 12 inch -----	30	92
Clay -----	$\frac{1}{2}$	92 $\frac{1}{2}$

5/3-32D1. Robert Abbott. Altitude about 2,985 feet. Drilled by J. S. Gobar in 1947.

Sand -----	8	8
Some clay and sand -----	4	12
Sandy clay -----	152	164
Hard clay -----	4	168
Cemented sand -----	2	170
Water sand (dirty) -----	22	192
Hardpan and clay -----	34	226
Cement -----	17	243
Gravel, dirty -----	6	249
Sandy clay -----	24	273
Clay, white and very hard -----	12	285
Cement -----	4	289
Sandy clay -----	12	301

Continued

195
Table 6

5/3-32D1.--Continued.

Material	Thickness (feet)	Depth (feet)	
			2,99
			62 f
Gravel, dirty -----	14	315	
Sandy clay -----	25	340	
Cement -----	8	348	Muck
Sandy clay -----	17	365	Tigh
Clay, sand and cement -----	20	385	li
Sandy clay -----	40	425	Clay
Cement -----	16	441	Rock
Clay, hard -----	11	452	Rock
Clay -----	33	485	Grave
Sandy clay -----	5	490	Hard
Clay -----	11	501	Grave

5/3-32L1. J. Godshall, formerly M. F. Ihmsen. Altitude 2,994.7 feet. Drilled in 1912. 14-inch casing.

Hard clay -----	28	28	
Hard clay and sand -----	54	82	
Hard cement -----	70	152	by Sa
Cement -----	4	156	Medium
Hard clay -----	17	173	Fine
Water, sand -----	7	180	Coarse
Fine sand -----	11	191	Sandy
Hard clay -----	6	197	Coarse
Fine sand -----	10	207	Sandy
Clay -----	7	214	Coarse
Fine sand -----	3	217	Sandy
Fine sand and gravel -----	8	225	Coarse
Fine sand -----	6	231	Sandy
Sand and clay -----	2	233	Coarse
No entry -----	14	247	Muddy
Clay -----	30	277	Coarse
Coarse sand -----	14	291	Sandy
Hard clay -----	13	304	Coarse

5/3-32N1. M. M. Brady. Altitude about 2,985 feet. Drilled by J. S. Gobar in 1952. 10-inch casing, perforated from 245 to 265 feet.

Top soil -----	10	10	
Loose sand -----	36	46	
Sandy clay -----	14	60	
Tough clay -----	7	67	5,
Sandy clay -----	107	174	2,960
Water sand -----	34	208	
Clay -----	6	214	Top soi
Sandy clay -----	26	240	Clay,
Water gravel, fine -----	25	265	Sandy
Clay -----	3	268	Gravel
Sand and clay, thin layers -----	10	278	
Tough clay -----	4	282	
Dead sand -----	18	300	

197
Table 6

5/3-33¹. Realton, formerly Robert Hitchcock. Altitude about 2,995 feet. Drilled in 1932. 10-inch casing, perforated from 43 to 62 feet. Yielded 46 gpm with 29-foot drawdown.

Material	Thickness (feet)	Depth (feet)
Mucky yellow clay -----	32	32
Tight rocky formation bearing very little water -----	2	34
Clay -----	6	40
Rock -----	3	43
Rock and clay -----	3	46
Gravel and loose rocks bearing water -----	5	51
Hard ledge of rock -----	2	53
Gravel and clay -----	4	57
Rocky clay -----	13	70
Hard clay with rock -----	4	74
Loose rock -----	4	78
Hard rock -----	3	81

5/3-35C¹. Pacific Water Co. Altitude about 2,955 feet. Drilled by Santa Rosa Drilling Co. in 1954. 12-inch casing.

Medium-grained brown sand -----	20	20
Fine brown sand -----	10	30
Coarse water sand -----	40	70
Sandy clay -----	40	110
Coarse sand -----	20	130
Sandy clay -----	10	140
Coarse sand -----	20	160
Sandy clay -----	20	180
Coarse sand -----	10	190
Muddy clay and sand -----	10	200
Coarse water sand -----	30	230
Sandy clay -----	20	250
Coarse sand -----	40	290
White sandy clay -----	10	300
Coarse water sand -----	70	370
Sandy clay -----	40	410
Coarse sand -----	30	440
Sandy clay -----	10	450
Coarse water sand -----	50	500

5/3-35G¹. A. L. Cooley, formerly Boyd Rust. Altitude about 2,960 feet. Drilled by L. O. Cozart in 1951. 10-inch casing.

Top soil -----	2	2
Clay, hardpan -----	8	10
Sandy clay, caliche -----	5	15
Gravel clay, dark -----	7	22

Continued

5/3-35G1--Continued.

Material	Thickness (feet)	Depth (feet)	feet 138 temp
Sand, gravel -----	21	43	
Sandy clay -----	26	69	
Clay -----	19	88	
Sand, gravel, water -----	52	140	Soil
Sand, clay, hard -----	36	176	Coar
Sand, gravel, water -----	16	192	Coar
Clay, sand -----	20	212	rc
Sand, clay, water -----	13	225	Coar
Clay -----	31	256	Grav
Gravel, sand, water -----	29	285	Toug
Caliche -----	11	296	sa
Clay, gravel -----	7	303	Sand
Conglomerate -----	43	346	pe
Rock, clay -----	12	358	ne
Clay and shale, blue -----	19	377	Clea
Sand, gravel, water -----	26	403	wa
Clay -----	7	410	Shal
			ye
			c.

5/4-4B1. Southwestern Portland Cement Co. Altitude about 2,690 feet. Drilled by Howard Ley to 208 feet and Roscoe Moss to 350 feet in 1954. 16-inch casing, perforated from 240 to 326 feet.

Material	Thickness (feet)	Depth (feet)	feet from Sanc Wat Bou Gra Gra Sam wi Sam r c Coa Coa 1 a
Soil -----	7	7	
Coarse sand and gravel -----	21	28	
Sand, gravel and rock to 12 inch, water -----	10	38	
Compact sandy yellow clay -----	58	96	
Sand $\frac{1}{4}$ inch to 1 inch, sharp rock formation, loose -----	20	116	
Coarse sand and sharp rock embedded in touch caliche -----	54	170	
Coarse sand and gravel, loose -----	2	172	
Compact yellow clay, sand and embedded 3/4-inch gravel -----	12	184	
Coarse sand and gravel, loose -----	4	188	
Compact yellow clay, embedded sand and gravel -----	12	200	
Coarse sand and gravel -----	8	208	
Sand to $\frac{1}{4}$ inch, gravel -----	6	214	
Brown sandy clay and embedded gravel -----	24	238	
Sand to 3/4 inch, gravel, muddy -----	8 $\frac{1}{2}$	246 $\frac{1}{2}$	
Brown sandy clay -----	1 $\frac{1}{2}$	248	
Sand to 3/4 inch, gravel and clay -----	8	256	
Sand to 1 inch, muddy -----	23	279	
Brown sandy clay -----	1	280	
Clay and gravel -----	7	287	
Clay, cemented gravel -----	3	290	
Sand to 3/4 inch, gravel, loose -----	8	298	
Sand to 3 inches, gravel, tight -----	14	312	
Sand to 3/4 inch, gravel, loose -----	2	314	
Sandy clay and emboddied gravel -----	36	350	

199
Table 6

5/4-4G1. Southwestern Portland Cement Co. Altitude about 2,695 feet. Drilled by Howard Ley in 1951. 16-inch casing, perforated from 138 to 152 feet. Yielded 950 gpm with 17 feet of drawdown. Water temperature of 70°F.

Material	Thickness (feet)	Depth (feet)
Soil -----	7	7
Coarse sand -----	21	28
Coarse sand and gravel and 10-inch rock -----	8	36
Coarse sand and gravel -----	8	44
Gravelly yellow clay -----	52	96
Tough yellow clay, small amount of sand and gravel -----	4	100
Sand and gravel, 2-inch rock, 10-20 percent clay, firm, non-water-bearing -----	38	138
Clean river sand, 50 percent 3/4-inch water gravel, loose -----	14	152
Sharp sand and gravel embedded in yellow clay, three small tough clay ribs -----	8	160

5/4-4G2. Southwestern Portland Cement Co. Altitude about 2,690 feet. Drilled by J. W. Burkhardt in 1935. 10-inch casing, perforated from 299 to 310 feet. Yielded 600 gpm with 48 feet of drawdown.

Sandy soil -----	7	7
Water sand -----	22	29
Boulders and gravel -----	7	36
Gravel, clay -----	85	121
Gravel, clay, water flowed over casing when casing was lowered -----	11	132
Sand and gravel with clay, 20 percent rock, 60 percent sand, and 20 percent clay -----	167	299
Coarse sandy gravel and rocks, 40 percent rocks, 50 percent coarse gravel, 10 percent clay -----	11	310
Coarse gravel, rocks, sand and clay, 10 percent rocks, 70 percent sand and gravel, 20 percent clay -----	40	350

5/4-8Q1. Victorville County Water District. Altitude about 2,918 feet. Drilled by Mogle Brothers in 1953. 12-inch casing, perforated from 142 to 360 feet.

Material	Thickness (feet)	Depth (feet)
Top soil -----	12	12
Coarse sand -----	43	55
Cemented sand -----	15	70
Clay -----	12	82
Sand and rock, dry -----	18	100
Coarse sand -----	24	124
Clay -----	18	142
Coarse sand -----	10	152
Clay -----	12	164
Cemented sand -----	18	182
Sandy clay -----	14	196
Clay -----	10	206
Cemented sand -----	6	212
Clay -----	52	264
Cemented sand -----	28	292
Clay -----	24	316
Sand -----	6	322
Clay -----	10	332
Coarse sand -----	28	360
Clay -----	10	370
Quicksand -----	10	380
Clay -----	4	384
Clay and sand -----	24	408
Clay -----	6	414
Fine sand -----	6	420
Yellow clay -----	8	428
Blue clay and shale -----	22	450

5/4-9K1. Victorville County Water District. Altitude about 2,860 feet. Drilled by Howard Ley in 1948. 16-inch casing, perforated for 100 feet.

Soil -----	5	5
Sandy clay, yellow -----	48	53
Sand, some clay -----	7	60
Clean fine sand -----	2	62
Yellow clay -----	6	68
Coarse sand and gravel -----	3	71
Yellow clay -----	9	80
Sandy clay -----	21	101
Coarse sand, water -----	1	102
Tough yellow clay -----	10	112
Clean sand and gravel, water -----	2	114
Yellow clay -----	3	117
Sand and gravel, water -----	2	119

Continued

5/1-9K1.--Continued.

	Thickness (feet)	Depth (feet)
Sandy clay, tough ribs -----	5	124
Clean sand and clay ribs, mostly clay -----	10	134
Tough yellow clay -----	23	157
Clean coarse sand, water -----	2	159
Tough yellow clay -----	12	171
Coarse sand, water -----	1	172
Hardpan, tough yellow clay -----	15	187
Coarse sand and gravel, water -----	4	191
Clay -----	2	193
Cemented sand and small streak of lime -----	1	194
Coarse sand and gravel -----	15	209
Clay -----	4	213
Coarse sand and gravel, water -----	2	215
Yellow clay -----	10	225
Coarse sand and gravel, water -----	5	230
Yellow clay -----	15	245
Sand and gravel, water -----	2	247
Sandy clay -----	11	258
Coarse sand, water -----	2	260
Clay -----	5	265
No entry -----	1	266
Tough clay -----	14	280
Sand and gravel -----	3	283
Clay -----	2	285
Coarse sand, water -----	5	290
Clay -----	4	294
Coarse sand and gravel, water -----	9	303

5/4-10N3. Anna Weiss. Altitude about 2,762 feet. Drilled by
J. S. Gobar in 1941. 8-inch casing, perforated from 140 to 180 feet.

Shaft (not logged) -----	30	30
Quicksand -----	8	38
Cement -----	2	40
Clay -----	4	44
Dirty gravel -----	13	57
Clay -----	10	67
Sandy clay -----	27	94
Decomposed granite, dirty -----	31	125
Sandy clay -----	27	152
Soft clay -----	24	176
Kaolin -----	9	185
Clay -----	10	195

5/4-9R2. Victorville High School. Altitude about 2,760 feet. Drilled by J. S. Gobar in 1934. 14-inch casing, perforated from 147 to 180 feet.

Material	Thickness (feet)	Depth (feet)
Top sand -----	18	18
Clay -----	6	24
Dirty sand -----	3	27
Clay -----	11	38
Fine gravel, water -----	12	50
Clay -----	7	57
Cement -----	1	58
Clay -----	20	78
Sandy clay -----	20	98
Fine gravel, water -----	17?	115?
Sandy clay -----	11?	126
Tough gray clay -----	15	141
Sandy clay -----	8	149
Clay -----	5	154
Dirty gravel, water -----	17	171
Gravel, water -----	24	195
Clay -----	6	201

5/4-10E1. Atchison Topeka and Santa Fe Railway. Altitude about 2,720 feet. Drilled by the Talmage Brothers in 1913. 15-inch casing, perforated from 22 to 52 feet and from 40 to 104 feet. Rock screen put around the casing in 1926. Yielded 30 gpm when drilled. Yielded 366 gpm after reperforating in 1926.

Sand -----	22	22
Clay -----	4	26
Rock and sand -----	26	52
Hard sandy clay -----	52	104
Cemented gravel -----	60	164
Coarse cemented gravel -----	6	170
Hard sandy clay -----	22	192
Hard cemented sand -----	18	210
Sand and rock -----	11	221
Cemented clay and sand -----	9	230
Cemented sand and gravel -----	20	250

202
Table 6

60 feet.
from 117

Depth
(feet)

18
24
27
38
50
57
58
78
98
115?
126
141
149
154
171
195
201

5/4-10E2. Atchison Topeka and Santa Fe Railway. Altitude about 2,720 feet. Drilled by the Roscoe Moss Co. in 1922. 16-inch casing, perforated from 25 to 43 feet, 117 to 140 feet, and 173 to 243 feet. Yielded 450 gpm.

Material	Thickness (feet)	Depth (feet)
Soil -----	9	9
Sand -----	16	25
Coarse sand -----	17	42
Sandy clay -----	23	65
Clay -----	52	117
Gravel and clay -----	23	140
Cemented sand -----	10	150
Clay -----	7	157
Cemented gravel -----	16	173
Gravel and clay -----	11	184
Gravel -----	3	187
Gravel and clay -----	30	217
Gravel -----	6	223
Gravel and clay -----	20	243
Hard clay -----	5	248
Clay -----	49	297
Decomposed granite -----	8	305
Granite -----	12.5	317.5

tude about
inch casing,
k screen
• Yielded

5/4-10E3. Atchison Topeka and Santa Fe Railway. Altitude about 2,270 feet. Drilled by J. S. Gobar in 1938. 16-inch casing, perforated from 14 to 34 feet. Yielded 300 gpm.

Fine sand and gravel -----	19	19
Coarse gravel -----	14	33
Large rocks -----	7	40

104
164
170
192
210
221
230
250

5/4-10N1. Victorville County Water District. Altitude about 2,800 feet. Drilled by F. S. Marr in 1956. 14-inch casing, perforated from 264 to 402 feet. Yielded 1,363 gpm with 37 feet of drawdown.

Sand and granite -----	15	15
Sand -----	10	25
Sand and boulders -----	25	50
Fine sand and gravel -----	130	180
Sand with clay streaks -----	60	240
Boulders -----	2	242
Sand and gravel -----	18	260
Sandy gravel with streaks of clay -----	40	300
Sandy gravel with streaks of caliche -----	15	315
Boulders -----	2	317
Sandy gravel with streaks of clay -----	77	394
Clay, gravel and sand -----	11	405
Boulders -----	20	425

203
Table 6

5/4-11J1. G. Newton, formerly Paul Kirkpatrick. Altitude about 2,860 feet. Drilled by J. S. Gobar. 12-inch casing, perforated from 168 to 203 feet.

Material	Thickness (feet)	Depth (feet)
Top soil clay -----	2	.2
Sand, red, yellow and gray -----	12	14
Sandy clay -----	30	44
Sand, gray -----	24	68
Gray, brown and yellow clay -----	15	83
Kaolin and sand -----	10	93
Sandy clay -----	22	115
Sand, water -----	13	128
Clay, hard and gray -----	5	133
Sandy clay -----	11	144
Quicksand -----	6	150
Gray clay, sandy -----	10	160
Clay -----	4	164
Sandy clay -----	4	168
Gravel -----	22	190
Sandy clay -----	6	196
No entry -----	8	204
Sandy clay -----	4	208

5/4-13L1. E. L. Horton. Altitude about 2,815 feet. Drilled by L. O. Cozart in 1951. 14-inch casing to 100 feet, perforated from 126 to 176 feet. Yield 450 gpm with 40-foot drawdown.

Top soil -----	2	2
Hardpan -----	5	7
Sandy clay -----	3	10
Sand and boulders -----	15	25
Sand and gravel, water -----	27	52
Pea gravel and boulders -----	46	98
Brown clay, hard -----	23	121
Sand, gravel and boulders, water -----	14	135
Brown clay -----	15	150
Gravel, sand, water -----	18	168
Brown clay -----	8	176

5/4-13M1. W. E. Hartman. Altitude about 2,800 feet. Drilled by C. C. Lackyard in 1950. 12-inch casing, perforated from 38 to 124 feet.

Surface material -----	4	4
Decomposed granite -----	26	30
Fine sand, some small rock -----	8	38
Water in very fine silty sand -----	24	62
Water in brittle formation, cemented rocks and sand -----	24	86
Brown sandy clay -----	24	110
Water -----	6	116
Brown clay -----	5	121
Water -----	3	124

5/4-13N2. F. Johanson. Altitude about 2,805 feet. Drilled by C. C. Lackyard in 1950. 12-inch casing, perforated from 56 to 116 feet.

Material	Thickness (feet)	Depth (feet)
Surface material -----	8	8
Hardpan -----	27	35
Streaked fine brown sand and clay -----	20	55
Water -----	13	68
Cemented sand -----	17	85
Water -----	8	93
Brown clay -----	23	116

5/4-13N3. W. E. Hartman, formerly Carl Breeder. Altitude about 2,805 feet. Drilled by C. C. Lackyard in 1950. 8-inch casing to 78 feet and 6-inch casing from 78 to 126 feet, perforated from 74 to 126 feet.

Silt and clay -----	50	50
Decomposed granite, water -----	16	66
Hard cemented gray sand and boulders -----	12	78
Hard brown sand, very fine -----	14	92
Brown sandy clay -----	22	114
Conglomerate formation -----	13	127

5/4-13Q1. W. E. Hartman. Altitude about 2,820 feet. Drilled by C. C. Lackyard in 1949. 12-inch casing, perforated from 58 to 118 feet.

Surface material -----	5	5
Hard clay -----	5	10
Sandy clay -----	13	23
Decomposed granite -----	16	39
Gray sand and rocks, water -----	33	72
Cemented conglomerate, hard -----	6	78
Sandy clay -----	16	94
Water -----	21	115
Sandy clay -----	3	118

5/4-16B1. L. W. Young. Altitude about 2,870 feet. Drilled by C. C. Lackyard in 1948. 6-inch casing, perforated from 119 to 159 feet.

Surface material -----	6	6
Hardpan -----	6	12
Sandy yellow clay -----	18	30
Hard sand -----	50	80
Water gravels interbedded with clay layers -----	79	159

5/4-1601. Appleton Land, Water and Power Co. Altitude is 2,848.3 feet. 14-inch casing. Copied from California Department of Engineering (1918).

Material	Thickness (feet)	Depth (feet)	
Compact, gravelly soil -----	6	6	Soft
Compact, bedded, dry fine gravel -----	8	14	Sand,
Compact, medium coarse gravel -----	11	25	Hard
Bedded, coarse sand with fine gravel and thin layers of yellow clay -----	6	31	Hard
Very hard, light yellow, sandy clay -----	2	33	Fine
Bedded sand -----	2	35	Sand,
Compact, light yellow, sandy clay -----	14	49	Gypsu
Sand with small amounts of fine gravel -----	6	55	Rock
Compact, yellow, sandy clay -----	23	78	Hard
Soft, sandy clay and layers of water sand -----	9	87	
Compact, yellow, sandy clay -----	8	95	David
Coarse water sand -----	3	98	Sandy
Sandy, yellow clay -----	5	103	Calic
Sand with layers of hard clay -----	5	108	Sandy
Sandy, yellow clay and layers of sand -----	12	120	Sandy
Hard, grayish, sandy clay -----	8	128	Sand
Hard, rusty, yellow clay -----	39	167	Clay
Coarse sand and small amounts of fine clay -----	6	173	Clay
Hard, yellow, sandy clay -----	35	208	Sandy
Soft, sandy clay -----	9	217	Sand
Soft, sandy clay with layers of coarse sand and fine gravel and soft sandstone -----	16	233	Sandy
Very hard, sandy clay, changing every few feet in color and texture -----	34	267	Clay
Soft, sandy clay -----	7	274	Sand,
Coarse sand with clay and small amounts of gravel -----	4	278	drill feet.
Hard sandy clay -----	12	290	
Coarse sand with clay and small amounts of fine gravel -----	6	296	Coarse
Sandy yellow clay -----	21	317	Fine
Sand and fine gravel, dirty -----	16	333	Clay
Sandy gray clay -----	5	338	Two ad
Sand and fine gravel -----	24	362	of c
Hard gray clay -----	8	370	
Very compact shale-like yellow clay -----	10	380	5
Sand with very little fine gravel -----	22	402	2,810
Cemented coarse sand -----	13	415	perfor
Hard blue clay -----	23	438	
Blue and brown clay -----	22	460	Gravel
Layers of packed sand and sandy shale -----	70	530	Clay
Layers of packed sand and sandy shale mixed with boulders -----	25	555	Gravel

Continued

5/4-161...Continued.

Material	Thickness (feet)	Depth (feet)
Soft sandrock -----	3	558
Sand, clay and gravel -----	22	580
Hard shale -----	32	612
Hard shale with loose boulders -----	10	622
Hard shale -----	18	640
Sand, gravel and clay -----	128	768
Fine water sand and gravel -----	10	778
Sand, gravel, and clay -----	34	812
Gypsum conglomerate -----	14	826
Rock -----	9	835
Hard granite -----	26	861

5/4-21A1. John Brocker. Altitude about 2,925 feet. Drilled by David Engel in 1955. 8-inch casing, perforated from 160 to 200 feet.

Sandy gravel -----	10	10
Caliche -----	5	15
Sandy gravel -----	5	20
Sandy clay -----	25	45
Sand -----	10	55
Clay -----	13	68
Clay sand -----	22	90
Sandy clay -----	22	112
Sand -----	4	116
Sandy clay -----	24	140
Sand -----	6	146
Sandy clay -----	18	164
Clay -----	6	170
Sand, water -----	30	200

5/4-21G1. R. Sells, formerly Hughs. Altitude about 2,920 feet. drilled by T. E. Gunderson in 1946. 9-inch casing, perforated for 30 feet.

Coarse sand -----	40	40
Fine sand -----	20	60
Clay -----	82	142
Two aquifers separated by 12 feet of clay -----	23	165

5/4-26Q1. L. A. Phillips, formerly Flowers. Altitude about 2,810 feet. Drilled by R. D. Wilson in 1939. 8-inch casing, perforated from 57 to 59 feet and from 72 to 94 feet. Yielded 60 gpm.

Gravel -----	16	16
Clay -----	41	57
Gravel -----	1	58
Clay -----	14	72
Gravel and sand -----	28	100

5/4-27C6. D. Cascarella. Altitude about 2,880 feet. Drilled by L. F. McFadden in 1953. 9-inch casing.

Material	Thickness (feet)	Depth (feet)
Top soil -----	12	12
Loose sand -----	5	17
Sand and clay -----	21	38
Clay -----	5	43
Sand and clay -----	18	61
Clay -----	9	70
Sand and clay -----	8	78
Clay -----	3	81
Coarse water sand -----	13	94
Clay -----	2	96

5/4-27C7. J. Fenneberg, formerly F. M. Thompson. Altitude about 2,870 feet. Drilled by A. Cawrse in 1955. 8-inch casing, perforated from 95 to 135 feet.

Sand and clay -----	94	94
Gray water sand, gravel -----	39	133
Yellow clay -----	2	135

5/4-27F2. W. Engel, formerly C. Worley. Altitude about 2,875 feet. Drilled by L. O. Cozart in 1947. 6-inch casing, perforated from 72 to 132 feet.

Loose sandy clay -----	66	66
Coarse gravel -----	2	68
Sandy clay -----	14	82
Sand and gravel -----	3	85
Clay -----	34	119
Sand and gravel -----	13	132

5/4-33E1. Harold Welch. Altitude about 3,025 feet. Drilled by C. C. Lackyard in 1951. 6-inch casing, perforated from 191 to 231 feet and from 260 to 300 feet.

Surface material -----	12	12
Blue shale -----	36	48
Streaked brown sand and clay -----	47	95
Cemented sand -----	75	170
Sand, no water -----	5	175
Cemented conglomerate -----	30	205
Water -----	11	216
Streaked sand and clay, water -----	9	225
Hard sandy brown clay, swelling -----	20	245
Brown clay -----	15	260
Water in brittle formation -----	14	274
Sandy brown clay, water -----	26	300

5/4-3541. Kalin Co., formerly Verde Ranch. Altitude 2,799.1 feet.
Log from Thompson (1929).

Material	Thickness (feet)	Depth (feet)
Coarse sand and gravel -----	135	135
Blue clay -----	23	158
Coarse sandy gravel -----	30	188
Blue clay -----	13	201
Coarse sand and gravel -----	34	235
Blue clay -----	7	242
Coarse sand and gravel -----	26	268
Blue clay -----	9	277
Shaly rock -----	15	292
Coarse sand and gravel -----	22	314
Blue clay -----	10	324
Yellow clay -----	46	370
Soapstone -----	7	377
Coarse sand and gravel -----	39	416
Soapstone -----	5	421
Coarse sand and gravel -----	24	445
Soapstone -----	8	453
Coarse sand and gravel -----	34	487
Soapstone -----	9	496
Coarse sand and gravel -----	78	574
Blue clay, hard -----	150	724
Coarse sand and gravel -----	11	735
Shaly rock -----	4	739
Coarse sand and gravel -----	16	755
Shaly rock -----	4	759
Coarse sand and gravel -----	16	775
Shaly rock -----	4	779
Coarse sand and gravel -----	10	789
Yellow clay -----	10	799
Shaly rock -----	39	838
Blue clay -----	8	846
Shaly rock -----	55	901
Blue clay -----	7	908
Yellow clay -----	38	946
Blue clay -----	11	957
Shaly rock -----	28	985

5/4-35J1. Mojave River State Fish Hatchery. Altitude about 2,815 feet. Drilled by D. M. McCalla in 1952. 16-inch casing, perforated from 29 to 397 feet. Yielded 3,000 gpm with 49 feet of drawdown.

Top soil, fine sand -----	29	29
Water sand -----	61	90
Sandy clay -----	35	125
Coarse sand -----	25	150
Clay -----	20	170
Coarse sand -----	40	210
Fine gravel -----	80	290
Clay -----	25	315
Coarse sand -----	82	397
Clay -----	8	405

5/4-35J2. Mojave River State Fish Hatchery. Altitude about 2,815. Drilled by D. N. McCalla in 1952. 6-inch casing, perforated 100 to 400 feet. Water temperature 60°F.

Material	Thickness (feet)	Depth (feet)
Sand and silt -----	25	25
Coarse sand -----	42	67
Clay -----	4	71
Fine gravel -----	13	84
Clay -----	2	86
Sand -----	35	121
Coarse sand -----	44	165
Sandy clay -----	22	187
Sand -----	5	192
Gravel -----	17	209
Clay -----	2	211
Sand -----	69	280
Coarse sand -----	28	308
Clay -----	8	316
Sand and gravel -----	14	330
Fine gravel -----	62	392
Clay bottom -----	20	412

5/4-35L2. L. O'Neill. Altitude about 2,885 feet. Drilled by J. S. Gobar in 1950. 8-inch casing, perforated from 135 to 145 feet.

No entry -----	1	1-
Red clay with rocks -----	1	2
Cemented gravel -----	38	40
Brown clay -----	12	52
Sandy light brown clay -----	6	58
Brown sand -----	8	66
Gray sand -----	4	70
Mucky sand -----	10	80
Cemented gravel, water -----	28	108
Brown sandy clay -----	10	118
Brown cemented sand -----	10	128
Water gravel with cement reef -----	24	152

5/4-35H1. J. B. Andrews. Altitude about 2,910 feet. Drilled by J. S. Gobar in 1950. 8-inch casing, perforated 160 to 195 feet.

Material	Thickness (feet)	Depth (feet)
No entry -----	1	1
Windblown sand -----	1	2
Sandy clay with hard ribs -----	38	40
Cemented gravel -----	32	72
Sandy clay -----	26	98
Cemented gravel -----	20	118
Sandy clay -----	20	138
Brown clay -----	14	152
Cemented sand -----	16	168
Good water gravel -----	7	175
Cemented gravel -----	7	182
Good gravel -----	10	192
Cemented sand -----	8	200

5/4-35R1. Kalin Co., formerly Verde Ranch. Altitude about 2,885 feet. 1½-inch casing, perforated from 174 to 557 feet.

Top soil -----	10	10
Caliche -----	50	60
Shale and sand -----	60	120
Sand, water -----	10	130
Gravel, water -----	70	200
Shale, gray -----	20	220
Sand and gravel, water -----	80	300
Water sand and gravel, with shale lenses -----	257	557

5/4-36G1. Kalin Co., formerly Upper Verde Ranch. Altitude about 2,810 feet. Drilled by McCalla Bros. in 1952. 1½-inch casing, perforated 109 to 128 feet and 200 to 253 feet. Reported yield about 1,890 gpm with 30-foot drawdown.

Top sand -----	10	10
Coarse sand -----	13	23
Coarse gravel -----	40	63
Decomposed granite -----	8	71
Hard sand -----	13	84
Fine gravel -----	18	102
Clay and gravel -----	7	109
Coarse gravel -----	18	127
Tight clay and gravel -----	24	151
Sandy clay -----	39	190
Fine sand and gravel -----	6	196
Coarse gravel -----	44	240
Clay and coarse gravel -----	13	253
Rock and clay -----	33	286

5/4-3C12. Kalin Co. Altitude about 2,825 feet. Drilled by H. Scoggin in 1955. 18-inch casing, perforated from 20 to 265 feet. Yielded 2,000 gpm with 10 feet of drawdown.

Material	Thickness (feet)	Depth (feet)
Surface fill -----	10	10
Sand and surface fill -----	10	20
Outer gravel -----	30	50
Shale -----	13	63
Water sand and gravel -----	200	263
Shale, gray -----	2	265

5/5-5C1. R. D. Clark. Altitude about 2,945 feet. Drilled by Trenton and Rogers in 1956. 10-inch casing, perforated from 11 $\frac{1}{4}$ to 2 $\frac{1}{4}$ feet.

Top soil -----	3	3
Gray clay -----	11	14
Brown clay -----	25	39
Blue clay -----	8	47
Sandy brown clay -----	39	86
Sand and gravel -----	23	109
Blue clay -----	13	122
Light brown clay -----	47	169
Water sand -----	4	173
Brown clay -----	18	191
Blue clay -----	26	217
Water sand -----	5	222
Hardpan -----	21	243
Soft brown clay -----	8	251

5/5-8A1. L. E. Carder. Altitude about 3,005 feet. Drilled by F. D. McDougall in 1955. 8-inch casing, perforated from 264 to 293 feet.

Surface material -----	2	2
Sandy gray clay -----	16	18
Brown, sandy clay -----	14	32
Sticky brown clay -----	14	46
Sandy gray clay -----	17	63
Soft, sandy, brown clay -----	82	145
Sticky, brown clay -----	20	165
Sandy brown clay -----	10	175
Water sand, fine -----	5	180
Sticky, brown clay -----	78	258
Water sand -----	39	297
Light brown sandy clay -----	3	300

5/5-15N1. Willabel MacGregor, formerly C. R. Smyth. Altitude about 3,090 feet. Drilled by F. D. McDougall in 1951. 10-inch casing, perforated from 268 to 274 feet, 300 to 309 feet, and 341 to 365 feet.

Material	Thickness (feet)	Depth (feet)
Sandy soil -----	34	34
Hard gray shale -----	6	40
Sticky gray clay with shale ribs -----	150	190
Loose sandy clay -----	22	212
Sticky brown clay -----	28	240
Loose dry sand -----	4	244
Sticky brown clay -----	19	263
Brown sandy clay -----	9	272
Water-bearing sand -----	2	274
Brown sandy clay -----	15	289
Fine water sand -----	5	294
Sandy clay -----	4	298
Sticky brown clay -----	4	302
Water-bearing sand -----	4	306
Clay -----	35	341
Water-bearing sand with clay ribs -----	32	373

5/5-2LL. I. S. Clark. Altitude about 3,145 feet. 6-inch casing, perforated for 48 feet.

Sandy soil -----	308	308
Water sand -----	6	314
Clay -----	6	320

5/5-22KL. California Electric Power Co. Altitude about 3,105 feet. Drilled by J. S. Gobar in 1938. 8-inch casing, not perforated. Yielded 10 to 15 gpm.

Top soil -----	4	4
Cement -----	2	6
Cemented sand -----	8	14
Cement, very hard -----	6	20
Sandy clay with some cement -----	24	44
Silt -----	46	90
Cemented sand -----	9	99
Sandy clay, gray -----	125	224
Sticky clay -----	28	252
Sand -----	6	258
Sandy clay, gray -----	44	302
Clay with kaolin -----	5	307
Sand -----	9	316
Sandy clay -----	6	322
Sand with some clay -----	12	334
Clay with small gravel -----	12	346

Continued

5/5-22K1.--Continued.

Material	Thickness (feet)	Depth (feet)
Clay, very sticky	18	
Sandy clay	10	361
Clay	8	374
Sandy clay	8	382
Clay	5	390
Sandy clay	15	395
Clay and kaolin	10	410
Sandy clay	17	420
		437

5/6-22R1. Altitude about 3,285 feet. Drilled by Hockersmith
in 1923. Well destroyed.

Decomposed granite sand	90	90
Sandy clay	170	260
Fine sand	25	285
Clay and water sand	50	335
Red clay and sand	20	355
Sand and gravel	45	400
Sand, gravel, water	50	450
Water gravel	40	490
Clay	40	530
Sand, gravel, water	72	602
Hard sand rock	8	610
Clay and gravel	100	710
Blue shale	5	715
Water gravel	15	730
Blue and brown shale	70	800
Hard sand rock	87	887
Brown sandy shale	7	894
Hard sand	54	948
Brown sandy shale	32	980
Water gravel	85	1,065
Brown shale	22	1,087
Hard shell cap	3	1,090
Sand	12	1,102
Brown and blue sand	78	1,180
Brown sandy shale	35	1,215
Sandy shale	105	1,320
Blue and brown sand	15	1,335
Conglomerate	15	1,350
Crystal quartz	10	1,360
Lime and blue shale	125	1,485
Rock lime shale	115	1,600
Oyster shell and lime shale	97	1,697
Conglomerate, drilling stopped	20	1,717
Cored by Spangler Brothers	4	21,721

a. The above drilling was stopped with a statement that they had struck granite. Several years later the well was reportedly deepened to 3,216 feet and it is reported that drilling was through clays and shales.

6/3-9E1. Samuel C. Guess. Altitude about 3,095 feet. Drilled by David Engel in 1955. 8-inch casing, perforated from 35 to 60 feet. Yielded 5 gpm.

Material	Thickness (feet)	Depth (feet)
Clay -----	20	20
Sand -----	4	24
Sand clay -----	13	37
Sand -----	1	38
Rock -----	22	60

6/3-16C1. John Dickson. Altitude about 3,080 feet. Drilled by Ephraim Harris in 1951. 8-inch casing, not perforated. Yield 17 gallons per hour.

Surface type soil -----	13	13
Hard-packed sand and clay -----	25	38
Granite, not too hard -----	14	52
Hard granite -----	11	63

6/3-17C1. H. W. Steward. Altitude about 3,040 feet. Drilled by Ephraim Harris in 1951. 14-inch casing, perforated from 147 to 210 feet and 210 to 255 feet. Reported yield about 1,240 gpm with a 139-foot drawdown.

Surface type soil -----	30	30
Granite sand and silt -----	40	70
Granite sand and gravel to 7 inches -----	32	102
Sand and silt -----	28	130
Coarse clean granite sand and gravel to 4 inches -----	21	151
Sand and silt -----	11	162
Clean coarse granite sand and gravel to 1 inch -----	14	176
Coarse granite sand and gravel to 2 inches with buff-colored clay -----	24	200
Coarse clean sand and gravel to 7 inches, water -----	54	254
Coarse sand and gravel with buff- colored clay -----	6	260

6/3-33N1. W. J. Johnston. Altitude is about 2,930 feet. Drilled by David Engel in 1954. 8-inch casing, perforated from 90 to 135 feet. Yield 30 gpm with a 4-foot drawdown.

Top soil -----	2	2
Hardpan -----	12	14
Sandy clay -----	11	25
Gray clay -----	43	68
Blue shale -----	2	70
Sandy clay -----	10	80
Gray shale -----	2	82

Continued

6/3-33M1.--Continued.

Material	Thickness (feet)	Depth (feet)
Sand clay -----	12	94
Water sand -----	5	99
Hard sand -----	2	101
Water sand -----	11	112
Clay -----	4	116
Water gravel -----	4	120
Water sand -----	13	133
Clay -----	2	135

6/3-33N2. R. E. Clark. Altitude is about 2,930 feet. Drilled by L. F. McFadden in 1954. 9-inch casing, perforated from 95 to 138 feet.

Sand -----	35	35
Clay -----	18	53
Clay and sand -----	13	66
Brown clay -----	6	72
Green clay -----	4	76
Sand and clay -----	19	95
Water sand -----	19	111
Clay -----	2	116
Good coarse water sand -----	22	138
Clay -----	2	140

6/3-34M1. C. R. Read. Altitude about 2,940 feet. Drilled by A. T. Cawse in 1955. 8-inch casing, perforated from 98 to 175 feet.

Top soil -----	3	3
Hardpan -----	8	11
Sand and gravel -----	6	17
Sandy clay -----	39	56
Clay -----	22	78
Clay rock -----	20	98
Water sand -----	30	128
Fine yellow clay -----	32	160
Coarse water sand and gravel -----	15	175
Clay -----	3	178

6/3-34M2. C. R. Read. Altitude about 2,940 feet. Drilled by Paul Waas in 1948. 6-inch casing, perforated 105 to 119 feet.

Heterogeneous formations of clays
and sands not in definite

stratas -----	105	105
Water-bearing gravel and coarse sand -----	14	119
Yellow clay -----	1	120

6/3-34R1. Cedarquest. Altitude about 2,950 feet. Drilled by A. T. Cawrse. 8-inch casing, perforated 120 to 160 feet.

Material	Thickness (feet)	Depth (feet)
Top soil -----	3	3
Hardpan -----	2	5
Red sand -----	22	27
Blue clay -----	9	36
Coarse sand -----	4	40
Clay -----	23	63
Coarse sand -----	9	72
Clay -----	46	118
Dark sand -----	8	126
Water sand -----	11	137
Clay -----	11	148
Water gravel -----	10	158
Clay -----	2	160

6/3-35C1. Philip Linden. Altitude about 3,090 feet. Drilled by A. T. Cawrse. 8-inch casing, perforated 262 to 312 feet.

Top soil -----	3	3
Adobe clay -----	9	12
Coarse sand and rock -----	42	54
Sandstone -----	21	75
Hardpan and rock -----	15	90
Gray clay -----	6	96
Hard rock -----	75	171
Clay, light color -----	17	188
Hard sand -----	24	212
Dark sandy, dry -----	4	216
Streaks of clay and sand -----	4	220
Sand, water -----	4	224
Sand and clay -----	36	260
Sand rock -----	12	272
Coarse water sand -----	18	290
Blue clay -----	22	312

6/6-6Q2. Ralph Bryant. Altitude about 2,850 feet. Drilled by Studler Thorpe in 1955. 10-inch casing, perforated 70 to 116 feet, and 160 to 171 feet.

Top soil -----	30	30
Lake mud -----	40	70
Rock -----	5	75
Gravel, clay -----	40	115
Rock -----	2	117
Gravel, clay -----	68	185
Lava rock -----	50	235
Sand -----	6	241?

6/7-3-1. W. M. Gray. Drilled by Clampitt and Moss in 1912.
12-inch casing. Well destroyed.

Material	Thickness (feet)	Depth (feet)	Const tal bic (e the sho ned in Wat
Gray clay -----	10	10	
Red clay -----	10	20	
Cemented gravel, hard and soft layers, much cement -----	64	84	
Cemented gravel, loose, little cement -----	6	90	
Cemented gravel -----	61	151	
Fine gravel -----	24	175	Analy of
Cemented gravel -----	10	185	Cal
Red clay -----	1	186	(Th
Cemented gravel, streaks of sand -----	17	203	Ber
Cemented gravel -----	24	227	
Fine sand -----	10	237	Well
Clay -----	4	241	
Fine sand -----	26	267	
Coarse gravel, considerable clay mixed in chunks -----	10	277	Const Sil
Cemented gravel -----	8	285	Iro
Sand -----	5	290	
Clay, thin streak -----	--	290	Cal
Sand -----	10	300	Mig
Streaks of clay -----	7	307	Sod
Sand -----	8	315	Pot
Clay -----	6	321	
Good gravel -----	3	324	Bic
Fine sand -----	3	327	Car
Clay -----	1	328	Sul
Gravel -----	5	333	Chl
Clay -----	15	348	
Gravel -----	15	363	Flu
Clay -----	29	392	Nit
			Bor

6/7-22J1. Tanner Ranch. Altitude about 2,945 feet. Drilled by
David Engel in 1955. 8-inch casing, perforated from 102 to 137 feet.

Material	Thickness (feet)	Depth (feet)	Dis Sum Har
Sand -----	30	30	
Sandy gravel -----	18	48	
Sand, hard -----	12	60	
Sandy gravel -----	10	70	
Sand -----	12	82	
Clay -----	5	87	
Sand clay -----	11	98	
Sand -----	7	105	
Clay -----	11	116	
Sand, water -----	8	124	
Clay -----	2	126	
Sand, water -----	8	134	
Clay -----	3	137	

Table 7.- Chemical analyses of waters from wells

Constituents: The sum of determined constituents is the sum of the tabulated constituents minus approximately half (50.8 percent) of the bicarbonate. Because all of the commonly occurring major constituents (except silica in many of the analyses) were analytically determined, the values for dissolved solids and sum of determined constituents should be approximately the same. All values have been rounded where necessary to conform to the standards of the Geological Survey. Numbers in parentheses are values calculated by the Geological Survey, Ground Water Branch.

Analyzing laboratory: CSW Culligan Soft Water Co., DA U. S. Department of Agriculture, Rubidoux Laboratory, Riverside, Calif., DWR State of California, Department of Water Resources, GS U. S. Geological Survey (Thompson, 1929), PH California Department of Public Health, F San Bernardino County Flood Control District.

Well number	:	3/4-1R3	:	3/4-28P1
Constituents in parts per million				
Silica (SiO_2)		17		25
Iron (Fe)				
Calcium (Ca)		13		27
Magnesium (Mg)		4.2		5
Sodium (Na)		a12		17
Potassium (K)		--		1.2
Bicarbonate (HCO_3^-)		68		127
Carbonate (CO_3^{2-})		0		0
Sulfate (SO_4^{2-})		12		11
Chloride (Cl)		10		4
Fluoride (F)		.7		.4
Nitrate (NO_3^-)		1.5		6
Boron (B)		0		0
Dissolved solids (Dis. S)		106		120
Sum of determined constituents		(104)		(103)
Hardness as CaCO_3		50		(88)
Percent sodium (% Na)		35		(29)
Specific conductance (micromhos at 77°F)		140		226
pH		7.2		7.9
Temperature (°F)				70
Date collected (Date)		3-13-52		7-21-54
Depth of well in feet (Depth)		--		340
Analyzing laboratory (Lab.)		F		DWR
Laboratory number (No.)		2041		4791

a. Includes potassium.

Table 7

	3/4-31B1		4/1-18E1		4/2-3Q2
Constituents in parts per million					
SiO ₂					
Fe					
Ca	35	33	27	104	70
Mg	8.1	3.4	4.9	52	19
Na	a(11)	a(11)	12	128	a43
K	---	---	1.0	4.8	---
HCO ₃	152	132	112	205	(110)
CO ₃	0	0	0	0	
SO ₄	3.5	2.4	8.1	464	82
Cl	12	5.5	12	78	92
F			.6	1.4	
NO ₃			8.9	12	33
B			.04	1.7	.13
Dis. S					
Sum	(146)	(121)	(130)	1,070	
Hardness	121	95	88	(948)	(428)
%Na	(20)	(24)	23	(37)	(27)
Micromhos	275	237	231	1,420	
pH	6.9	7.0	6.8	7.7	
OF					
Date	6-29-42	9-21-42	6-2-53	3-16-55	9-27-32
Depth	25.6	25.6	25.6	200	222
Lab.	F	F	F	F	DA
No.	26A	26B	2692	5428	6748

a. Includes potassium.

221
Table 7

: 4/2-4E1 : 4/2-4Q1 : 4/2-16C1 : 4/2-22F1

Constituents in parts per million

SiO ₂				
Fe				
Ca	122	203	46	28
Mg	33	66	8	5
Na	275	625	95	55
K	6.2	12	2.3	1.5
HCO ₃	151	139	102	117
CO ₃	0	0	5	5
SO ₄	232	456	209	65
Cl	481	1,110	33	22
F	.4	.7	3.5	.8
NO ₃	2.5	2	2.0	7
B	.91	1.9	1.8	
Dis. S	1,300	2,760	511	268
Sum	(1,230)	(2,550)	(457)	(247)
Hardness	441	770	149	88
%Na	57	63	58	57
Micromhos	2,170	427	751	390
pH	8.0	7.8	8.1	8.5
°F				
Date	1-5-54		3-5-56	6-23-54
Depth	375	505	545	855
Lab.	F	F	DA	DA
No.	2976	2549	3835	3196

	4/3-6D1	4/3-7G1	4/3-9E1	4/3-9N1
Constituents in parts per million				
SiO ₂	12			
Fe	.1			
Ca	16	51	12	9
Mg	10	12	3	7
Na	a1.9	22	9	11
K	--	2.5	1.2	2.2
HCO ₃	78	178	71	68
CO ₃	0	0	0	5
SO ₄	10	27	2	9
Cl	12	30	2	5
F	.18	.2	.3	.4
NO ₃		22	3	1.5
B	0	.12	.05	0
Dis. S	124	301	94	92
Sum	(101)	(256)	(68)	(84)
Hardness	83	178	58	52
%Na	4.8	21	31	30
Micromhos	178	420	140	164
pH	6.7	7.8	7.5	8.7
of				
Date	12-13-49	12-9-55	3-5-54	5-7-56
Depth	--	--	168	501
Lab.	F	F	F	DA
No.	1202	3744	3071	3482
				3860

a. Includes potassium.

223
Table 7

	4/3-9Q1	4/3-10R1	4/3-20K1	4/3-21E1
Constituents in parts per million				
SiO ₂				
Fe				
Ca	15	48	16	24
Mg	7	13	3	8
Na	13	a50	a13	10
K	1.4	--	--	1.8
HCO ₃	90	217	85	100
CO ₃	0			0
SO ₄	11	38	.96	11
Cl	8	25	3.5	6
F	.4			.4
NO ₃	4.5	10	2.5	11
B	.08	.14	.01	.04
Dis. S	140	--	--	149
Sum.	(105)	(292)	(81)	(122)
Hardness	66	(326)	(52)	(93)
%Na	29	(38)	(36)	(21)
Micromhos	187	--	--	207
pH	7.6	--	--	7.5
OF				7.3
Date	5-8-56	1-26-32	7-15-32	3-8-55
Depth	494	--	180	180
Lab.	F	DA	DA	DWR
No.	3861	5596	6467	8716
	5424			

a. Includes potassium.

	: 4/4-28E1 :	4/5-1K1		: 5/2-3-1 :	5/2-32K1
Constituents in parts per million					
SiO ₂		5			38
Fe		.5			
Ca	28	17	17	54	96
Mg	4	8.8	5	8.9	31
Na	16	a44	45	a63	64
K	.9	--	2.5	--	5
HCO ₃	134	151	151	193	105
CO ₃	0	0	0	0	0
SO ₄	6	22	8	91	155
Cl	5	13	14	37	206
F	.2		.4		.6
NO ₃	2.5	15	22	4	7.4
B	0	0	.05		
Dis. S	151	--	203		712
Sum	(130)	(200)	(189)	(392)	(617)
Hardness	86	78	62	(171)	366
ZNa	28.7	(27)	60	(42)	27
Micromhos	216	341	308		1,120
pH	8.0	7.9	8.2		7.6
OF					
Date	7-20-54	9-21-42	4-1-54	8-12-12	12-1-53
Depth	709	400	400	--	350
Lab.	F	F	F	(b)	F
No.	3205	18C	3073	--	2938

a. Includes potassium.

b. From Thompson (1929).

225
Table 7

	5/2-32Pl	5/3-3J1	5/3-11C2	5/3-15A1	5/3-18F1
Constituents in parts per million					
SiO ₂				40	18
Fe				0	2.0
Ca	87	33	35	73	
Mg	23	5	6	18	
Na.	66	60	66	a79	
K	3.4	2.7	2.8	--	
HCO ₃	110	95	102	132	
CO ₃	0	0	2	0	
SO ₄	156	104	124	141	
Cl	139	29	28	127	30 6.6
F	.7	1.6	3.5	1.2	
NO ₃	8.4	11	5		
B	.42	.20	.48	.22	
Dis. S	538	335	398	619	
Sum	(539)	(294)	(324)	(545)	
Hardness	(312)	(102)	111	258	
Na	(31)	(55)	56	40	
Micromhos	865	463	501	790	
pH	7.6	7.8	8.1	7.8	7.5
OF	72				
Date	3-9-55	3-9-55	4-24-56	3-21-52	3-23-55
Depth	570	115	105	260	--
Lab.	DWR	DWP	F	F	CSW
No.	5421	2427	3859	2069	10812

a. Includes potassium.

	5/3-22A1	5/3-24E3	5/3-25G1	5/3-27E1	5/3-28A1
--	----------	----------	----------	----------	----------

Constituents in parts per million

SiO ₂					
Fe					
Ca	103	56	89	62	16
Mg	26	19	24	14	2.7
Na	108	84	164	78	a9.4
K	4.7	4.0	5.0	3.6	--
HCO ₃	122	137	85	104	95
CO ₃	0	0	0	0	HC
SO ₄	186	134	217	167	CO
Cl	219	99	269	99	SO
F	1.2	1.2	1.2	.6	Cl
NO ₃	6.8	9.4	7.9	6.1	F
B	.20	.25	.54	.92	NO
Dis. S	866	532	879	512	B
Sum	(716)	(475)	(820)	(483)	Di
Hardness	(364)	218	(321)	(212)	Na
%Na	(39)	45	(52)	44	Micro
Micromhos	1,260	825	1,351	730	pH
pH	7.6	8.1	72	8	oF
Date	4-15-54	12-2-53	3-9-55	3-22-55	Date
Depth	267	250	180	743	Dept
Lab.	DWR	F	DWR	DWR	Lab.
No.	P-484	2936	5426	2375	No.

a. Includes potassium.

	5/3-32D1	5/3-32L1	5/3-33Q1	5/3-35C1
--	----------	----------	----------	----------

Constituents in parts per million

SiO ₂			15	
Fe			.2	
Ca	62	26	41	44
Mg	16	8.6	15	13
Na	86	a4.2	a51	54
K	3.2	--	--	2.9
HCO ₃	100	101	165	171
CO ₃	0		0	0
SO ₄	163	56	93	98
Cl	109	11	24	23
F	.8		0	.8
NO ₃	2.5	2.4	3.7	5.5
B	.56	.17	.06	.26
Dis. S	535		360	348
Sum	(493)	(158)	(325)	(326)
Hardness	(221)	(101)	167	(163)
Na	(45)	(47)	(40)	41
Micromhos	878		529	542
pH			7.5	7.8
Date	3-8-55	1-20-32	3-7-44	6-2-53
Depth	501	304	81	81
Lab.	DWR	DA	DA?	F
No.	5446	5563	120	2690
				3797

a. Includes potassium.

	: 5/3-35N1 :	: 5/4-301 :	: 5/4-303 :	: 5/4-3F1 :	: 5/4-3F3 :
Constituents in parts per million					
SiO ₂					
Fe			0		0
Ca	82	29	80	114	117
Mg	21	1	18	27	25
Na	85	165	69	160	152
K	3.0	17.6	1.2	4.9	3.0
HCO ₃	114	19	254	310	268
CO ₃	0	19	0	0	0
SO ₄	177	238	109	294	269
Cl	151	99	70	129	163
F	.5	.8	.8	.6	.8
NO ₃	3.0	0	0	0	1.0
B		.12		.26	.46
Dis. S	671	664	493	924	909
Sum	(580)	(578)	(475)	(885)	(865)
Hardness	290	75	275	396	396
%Na	39	(77)	35	46	(451)
Micromhos	935	1,170	820	1,420	1,460
pH		11.1	7.2	6.8	7.2
OF					
Date	--	9-2-55	9-2-55	4-30-54	9-2-55
Depth	200	249	68.8	22	15
Lab.	F?	F	F	F	F
No.	3753	3677	3682	3123	3672

229
Table 7

	5/4-3F4	5/4-3L1	5/4-3P1	5/4-9H2
Constituents in parts per million				
SiO ₂				10
Fe	0	0	0	0
Ca	137	121	64	9.2
Mg	36	28	16	5.9
Na	115	126	63	a36
K	3.0	3.0	1.6	—
HCO ₃	266	256	239	90
CO ₃	0	0	0	6
SO ₄	235	240	76	6
Cl	195	160	54	6
F	.8	.6	.8	.3
NO ₃	1.0	1.0	8.0	6
B	.32	.54	.18	.1
Dis. S	962	862	441	130
Sum	(856)	(808)	(403)	(130)
Hardness	491	418	224	47
%Na	34	(39)	38	(62)
Micromhos	1,480	1,460	716	194
pH	7.1	7.6	7.2	8.0
OF				8.5
Date	9-2-55	9-2-55	9-2-55	3-8-44
Depth	—	35	32	158
Lab.	F	F	F	F
No.	3671	3673	3662	129
				2681

a. Includes potassium.

	5/4-9K1		5/4-9R1		5/4-10C1
Constituents in parts per million					
SiO ₂	20				
Fe	.5			0	0
Ca	13	5	4.3	9	45
Mg	6.1	2	1.5	2	10
Na	a37	36	38	30	42
K	--	1.3	1.0	1.6	1.6
HCO ₃	89	100	98	107	163
CO ₃	6	5	0	0	0
SO ₄	8.0	7	8.2	6	47
Cl	8.2	4	5	3	38
F	.6	.3	.3	.2	.4
NO ₃	0	3	.5	1.0	4.0
B	0	.06	0	0	.10
Dis. S	130	124	116	85	300
Sum	(189)	(114)	(157)		(269)
Hardness	56	19	17	30	154
%Na	(59)	78	82	67	37
Micromhos	196	185	--	172	502
pH	8.2	8.7	--	7.8	7.5
OF				74	
Date	8-6-48	4-1-54	--	2-17-54	9-2-55
Depth	303	303	225	225	33
Lab.	F	F	F	DNR	F
No.	900	3074	--	5008	3659

a. Includes potassium.

231
Table 7

	5/4-10E1	5/4-10NL		5/4-11P1
Constituents in parts per million				
SiO ₂	cl2	10		17
Fe		0		.3
Ca	18	17	11	50
Mg	4.9	3	.5	11
Na	a31	a22	30	a92
K	--	--	1.3	--
HCO ₃	110	108	88	139
CO ₃	0	4	5	0
SO ₄	21	13	11	110
Cl	14	4.6	6	83
F			.2	
NO ₃		8.1	1.0	17
B		0	0	.37
Dis. S		171		433
Sum	(156)	(135)	153	317
Hardness	(65)	56	(110)	(277)
ZNa	--	(45)	67	(54)
Micromhos	--	203	200	805
pH	--	7.0	8.3	7.2
°F				7.8
Date	11-27-15	8-2-45	10-27-55	10-28-46
Depth	200	425	425	65
Lab.	(b)	F	F	F
No.	--	333	3720	533
				1588

a. Includes potassium.

b. From Thompson (1929).

c. Includes SiO₂, Fe₂O₃, and Al₂O₃.

	5/4-11P2	5/4-13E1	5/4-35A2
Constituents in parts per million			
SiO ₂			
Fe			
Ca	26	21	9.0
Mg	1.2	4.2	2.1
Na	a64	58	28
K	--	1.9	1.9
HCO ₃	84	98	87
CO ₃	0	0	0
SO ₄	41	46	7.5
Cl	67	52.2	0
F		.7	
NO ₃	13	.6	.5
B	.20	.30	.10
Dis. S		265	
Sum	(254)	(234)	(92)
Hardness	69	(70)	(31)
%Na	(67)	(63)	(64)
Micromhos	454	404	169
pH	8.0	7.6	7.8
OF		69	
Date	9-21-42	5-6-55	5-26-55
Depth	323	323	306
Lab.	F	DWR	DWR
No.	35A	P-111	2444
a. Includes potassium.			

233
Table 7

	5/4-35A3	5/4-35J1	5/4-36P1	5/5-8A1
Constituents in parts per million				
SiO ₂	10	24		
Fe	0	.03		
Ca	19	11	15	9.8
Mg	2	5.6	7	5.7
Na	a13	a25	15	all
K	--	--	1.1	--
HCO ₃	88	79	98	73
CO ₃		14	0	0
SO ₄	T	8.6	6	1.8
Cl	1.8	3.8	5	8.8
F			.4	.4
NO ₃	T	12	0	4.2
B	.01	.30	.02	.06
Dis. S		111	84	
Sum	(80)	(130)	(172)	(77)
Hardness	(56)	50	(66)	48
(261)				310
%Na	(32)	(52)	(32)	(31)
Micromhos		188	159	139
pH		8.7	7.9	7.4
OF	60			
Date	1-7-32	10-29-45	8-12-52	9-21-42
Depth	--	--	405	270
Lab.	DA	F	DVR	F
No.	5422	363	2159-G	33A

a. Includes potassium.

T. Trace.